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**Evaluation of the Environmental
Effects of Western Surface Coal Mining
Volume II. Mine Inventory**

Mathtech, Inc, Princeton, NJ

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Industrial Environmental Research
Laboratory
Cincinnati OH 45268

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Research and Development

PB 301249



Evaluation of the Environmental Effects of Western Surface Coal Mining

Volume II:
Mine Inventory

Interagency
Energy/Environment
R&D Program
Report

A large decorative graphic at the bottom of the page. It consists of a black, curved, wave-like shape at the top, which transitions into a grid of black and white rectangular blocks below. The grid is composed of several rows and columns of blocks, some of which are white, creating a pattern that resembles a stylized landscape or a series of steps.

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EVALUATION OF THE ENVIRONMENTAL
EFFECTS OF WESTERN SURFACE
COAL MINING

VOLUME II: MINE INVENTORY

by

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FOREWORD

When energy and material resources are extracted, processed, converted, and used, the polluttional impact on our environment and even on our health often requires that new and increasingly more efficient pollution control methods be used. The Industrial Environmental Research Laboratory-Cincinnati (IERL-CI) assists in developing and demonstrating new and improved methodologies that will meet these needs both efficiently and economically.

This report contains a tabular summary of information on the physical and technological characteristics of 37 surface coal mines active in the western United States during 1975, and seven additional mines under development during that year. The information was used in classifying western mining situations into categories within which physical and technological factors were fairly homogeneous, in identifying the potential extent and severity of the effects of those mining operations on the environment, and in determining the frequency of use of alternative reclamation practices. The sources of the information were coal company mining and reclamation plans filed with government regulatory agencies, research reports, and articles in trade journals. The data contained in this report should prove beneficial to those individuals interested in the development of western surface coal mining. For further information, contact the Resource Extraction and Handling Division.

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Director
Industrial Environmental Research Laboratory
Cincinnati

ABSTRACT

This report is a companion volume to the report entitled, "Evaluation of the Environmental Effects of Western Surface Coal Mining". This report containing a tabular summary of general information is specifically designed to evaluate the surface mining methods presently employed in the mining of western coal in arid and semi-arid regions and to evaluate the effects these methods have on the environment. The information was used in classifying western mining situations into categories within which physical and technological factors were fairly homogeneous in identifying the potential extent and severity of the effects of those mining operations on the environment, and in determining the frequency of use of alternative reclamation practices. This report was submitted in fulfillment of Contract No. 68-03-2226 by Mathematica, Inc. under the sponsorship of the U.S. Environmental Protection Agency. This report covers the period June 30, 1975 to June 1977 and the work was completed as of March 1978.

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ACKNOWLEDGMENTS

The information presented in this volume was compiled with the cooperation and assistance of the U. S. Geological Survey and the state reclamation agencies in Colorado, Montana, New Mexico, North Dakota and Wyoming.

INTRODUCTION

This report is a companion volume to the report entitled, "Evaluation of the Environmental Effects of Western Surface Coal Mining". It contains a tabular summary of general information for 37 surface coal mines active in the western United States during 1975 and for seven additional mines that were under development in that year. In total, 44 mines in the following states are included:

<u>State</u>	<u>Number of Mines</u>
Arizona	2
Colorado	9
Montana	5
New Mexico	4
North Dakota	8
Wyoming	16
TOTAL	44

The following six different types of information are presented in this volume for each of those 44 mines:

- General production information, including 1975 production and projected maximum production; mine life; employment; and disturbed acreage.
- Coal seam characteristics, including average thickness, heating value, sulfur content, and ash content.
- Reclamation practices.
- Types of mining and reclamation research studies in progress.
- Overburden characteristics, pit geometry, and mining methods.

- Equipment types and capacities for major stripping equipments only.

All information in this volume was obtained from public sources. The major sources were the following ones:

- Mining and reclamation plans submitted by mining companies to state reclamation agencies.
- Environmental impact statements prepared by Federal government agencies for mines at which Federally owned coal is being or is planned to be surface-mined.
- Articles in trade journals, primarily Coal Age, Mining Congress Journal, and Coal Mining and Processing.
- Newsletters published by state and Federal geological agencies.
- Research reports published by mining companies, state universities, or Federal government agencies.
- Personal conversations with representatives of state reclamation agencies and with state geologists.

The first versions of the information, which were compiled in July 1976, were reviewed for accuracy and completeness and were edited by specialists in the state reclamation agencies. The edited version was then updated in March 1977. The updated version appears in this volume.

The English system of measurement was used.* Coal seam thicknesses, overburden and interburden depths, highwall heights, pit widths, and pit lengths are expressed in feet. Average annual precipitation and topsoil depths are expressed in inches. Areas of non-applicability and missing data are denoted by zero entries. For example, a zero entry for overburden depth means that the depth was not specified in public sources. In contrast, an entry of zero for the factor, "No. of Irrigated Growing Seasons" means that no irrigation is used. Accordingly, judgment must be used in interpreting zero entries.

The information in this volume, supplemented by information gathered during seasonal field surveys of nine western mines, was the basis for the statistics presented in Section 6 of the accompanying volume.

* A metric conversion table is contained in Appendix A.

ARIZONA

- BLACK MESA
- KAYENTA

MINE NAME

BLACK MESA

STATE ARIZONA
COUNTY NAVAJO
COMPANY PEA BODY
1975 SURFACE COAL TONNAGE 3822265
1975 ACRES DISTURBED BY MINING 100
PROJECTED MAXIMUM ANNUAL TONNAGE 5000000
FIRST YEAR AT MAXIMUM TONNAGE 1977
NUMBER OF PITS 3
MINE OPENING YEAR 1969
REMAINING MINE LIFE 30
1975 MINE EMPLOYMENT 157
STRIP RATIO(CU YD PER TON) 3.0
SURFACE RIGHTS OWNER(S) INDIAN
MINERAL RIGHTS OWNER(S) INDIAN
AVERAGE ANNUAL PRECIPITATION 7
TOPOGRAPHY ROLLING
ALTITUDE 6550
PREMINING LANDUSE(S) SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM) 4.42
POSTMINING LANDUSE(S) SHEEP GRAZING

MINE NAME

BLACK MESA

SEAM NAME RED
AVERAGE THICKNESS 25
SEAM NAME N
AVERAGE THICKNESS 0
TYPE OF COAL BITUMINOUS
BTU 11000
PERCENT SULFUR .5
PERCENT ASH 8.0
MARKET ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED 1

THICKNESS OF ALL SEAMS SURFACE MINED 25
 UNDERGROUND MINING OF THE SAME SEAMS NO
 BLEND COAL TO MEET CONTRACT SPECS. NO
 MINE MOUTH POWER PLANT NO
 ASH DISPOSAL ON MINE SITE NO
 PERCENT DIP OF COAL 5

MINF NAME

BLACK MESA

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	NO
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	IMPOUNDMENT
MAX HEIGHT OF LAST-CUT HIGHWALL	130
MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
GRADING EQUIPMENT	DOZER

MINE NAME

BLACK MESA

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	NO
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	NO
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	NOT APPLICABLE
DEPTH REPLACED (INCHES)	0
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

BLACK MESA

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN PARTING

MINE NAME
BLACK MESA

PIT NAME
BE1260

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
34
AREA
1
2
DUAL
DRAGLINE-SCRAPER-DOZER
95
13
0
NOT APPLICABLE
0
0
NO
0

MINE NAME
BLACK MESA

PIT NAME
W7800

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
33
AREA
1
1
SINGLE
DRAGLINE
80
0
0
NOT APPLICABLE
0
0
NO
0

MINE NAME
BLACK MESA

PIT NAME
M8750

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKFLINE
33
AREA
1
1
SINGLE
DRAGLINE
80
0
0
NOT APPLICABLE
0
0
NO
0

00

MINE NAME
BLACK MESA

PIT NAME
RE1260
M7800
M8750

EQUIPMENT TYPE
DRAGLINE
SCRAPER
DRAGLINE
DRAGLINE
DRAGLINE
MODEL
RE1260
WABCC
CATCS
M78CC
M8750
NO OF UNITS
1
1
0
1
1

CAPACITY
(CU YD)
36
0
0
30
0
BOOM LENGTH
(FEET)
250
0
0
175
275

MINE NAME

KAYENTA

STATE	ARIZONA
COUNTY	NAVAJO
COMPANY	PEABODY
1975 SURFACE CCAL TONNAGE	2577735
1975 ACRES DISTURBED BY MINING	120
PROJECTED MAXIMUM ANNUAL TONNAGE	8000000
FIRST YEAR AT MAXIMUM TONNAGE	1977
NUMBER OF PITS	2
MINE OPENING YEAR	1973
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	111
STRIP RATIO(CU YD PER TON)	.0
SURFACE RIGHTS OWNER(S)	INDIAN
MINERAL RIGHTS OWNER(S)	INDIAN
AVERAGE ANNUAL PRECIPITATION	7
TOPOGRAPHY	ROLLING
ALTITUDE	6600
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	4.42
POSTMINING LANDUSE(S)	SHEEP GRAZING
SEAM NAME	GREEN
AVERAGE THICKNESS	5
SEAM NAME	BLUE
AVERAGE THICKNESS	8
TYPE CF CCAL	BITUMINOUS
BTU	11000
PERCENT SULFUR	.5
PERCENT ASH	8.0

MINE NAME

KAYENTA

MINE NAME	KAYENTA	
MARKET	ELECTRIC UTILITY	
TOTAL NUMBER OF SEAMS SURFACE MINED	2	
THICKNESS OF ALL SEAMS SURFACE MINED	13	
UNDERGROUND MINING OF THE SAME SEAMS	NO	
BLEND COAL TO MEET CONTRACT SPECS.	NO	
MINE MOUTH POWER PLANT	NO	
ASH DISPOSAL ON MINE SITE	NO	
PERCENT DIP OF COAL	5	
AQUIFER IN OVERRURDEN OR COAL	YES	
TYPE OF AQUIFER	CONFINED	
STRATA CONTAINING AQUIFER	CONSOLIDATED OVERRURDEN	
FUNCTION OF AQUIFER STRATA	RECHARGE	
DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL	
PREMINING WELL YIELD (GAL PER MIN)	0	
USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK	
DIVERSION DITCHES TO CONTROL RUNOFF	NO	
STREAM DIVERSION	NO	
PUMP PIT	YES	
SEDIMENT BASINS	NO	
CHEMICAL TREATMENT OF DRAINAGE	NO	
RESTORE CONTOUR	YES	
MAX PERCENT SLOPE ON POX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR	
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR	
REDUCE LAST-CUT HIGHWALL	IMPOUNDMENT	
MAX HEIGHT OF LAST-CUT HIGHWALL	130	
MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED	
GRADING EQUIPMENT	DOZER	

MINE NAME

KAYENTA

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	NO
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	NO
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	NOT APPLICABLE
DEPTH REPLACED (INCHES)	0
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

KAYENTA

STUDIES UNDERTAKEN AT MINE	NCNE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN PARTING

MINE NAME

KAYENTA

PIT NAME

BE2570

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERRUPTED
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
50
AREA
I
I
SINGLE
DRAGLINE
0
0
0
NOT APPLICABLE
0
0
NO
0

MINE NAME

KAYENTA

PIT NAME

M8750

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERRUPTED
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
50
AREA
I
I
SINGLE
DRAGLINE
C
0
0
NOT APPLICABLE
0
0
NO
0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FFET)
KAYENTA	BE2570	DRAGLINE	BE2570	1	90	0
	M8750	DRAGLINE	M8750	1	84	300

COLORADO

- COLOWYO
- CORELY S&A
- CRAIG
- EDNA
- ENERGY
- MARR NO 1
- NUCLA
- SENECA
- WILLIAMS FORK

MINE NAME

COWLEYO

STATE	COLORADO
COUNTY	MOFFAT
COMPANY	W.R. GRACE
1975 SURFACE CCAL TONNAGE	0
1975 ACRES DISTURBED BY MINING	0
PROJECTED MAXIMUM ANNUAL TONNAGE	300000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	1
MINE OPENING YEAR	1976
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	0
STRIP RATIO (CU YD PER TON)	5.7
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	18
TOPOGRAPHY	HILLY
ALTITUDE	7300
PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
PRODUCTIVITY (ACRES PER AUM)	6.25
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME

COWLEYO

SEAM NAME	F SEAM
AVERAGE THICKNESS	5
SEAM NAME	E SEAM
AVERAGE THICKNESS	7
TYPE OF CCAL	BITUMINOUS
BTU	10728
PERCENT SULFUR	0.6
PERCENT ASH	6.0

MARKET		ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	8	
THICKNESS OF ALL SEAMS SURFACE MINED	52	
UNDERGROUND MINING OF THE SAME SEAMS	NO	
BLEND COAL TO MEET CONTRACT SPECS.	NO	
MINE MOUTH POWER PLANT	NO	
ASH DISPOSAL ON MINE SITE	NO	
PERCENT DIP OF COAL	10	

MINE NAME ----- COLONY		
AQUIFER IN OVERRURDEN OR COAL	NO	
TYPE OF AQUIFER	NOT APPLICABLE	
STRATA CONTAINING AQUIFER	NOT APPLICABLE	
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE	
DEPTH TO WATER IN NEARBY WELLS	NO WELLS	
PREMINING WELL YIELD (GAL PER MIN)	0	
USE OF NEARBY WELLS	YES	
DIVERSION DITCHES TO CONTROL RUNOFF	YES	
STREAM DIVERSION	YES	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	NO	
RESTORE CONTOUR	YES	
MAX PERCENT SLOPE ON BOX CUT SPOILS	25	
MAX PERCENT SLOPE ON OTHER SPOILS	25	
REDUCE LAST-CUT HIGHWALL	YES	
MAX HEIGHT OF LAST-CUT HIGHWALL	390	
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR	
GRADING EQUIPMENT	DOZER	

MINE NAME

COLONY

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

YES
NO
YES
NO
IF NECESSARY
IF NECESSARY
SCRAPER
9
NO
DRILL
GRASSES-LEGUMES-SHRUBS
YES
FERTILIZER
NO
NO
0
YES
IF NECESSARY

MINE NAME

COLONY

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION-HYDROLOGY
EROSION AND SEDIMENTATION
SHALLOW SOILS
WIND EROSION

MINE NAME

COLDWYD

PIT NAME	MAIN
----------	------

PIT ORIENTATION	STRIKELINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	MODIFIED OPEN PIT
NUMBER OF SEAMS	8
NUMBER OF OVERBURDEN LIFTS	1
STRIPPING SUBSYSTEM	DUAL
STRIPPING EQUIPMENT	DRAGLINE-SHOVEL-TRUCK
AVERAGE OVERBURDEN DEPTH	14
AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
AVERAGE INTERBURDEN DEPTH	7 ⁹
POSITION WHEN STRIPPING INTERBURDEN	INTERBURDEN
PIT LENGTH	4000
PIT WIDTH	120
DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME

CORELY SEA

STATE	COLORADO
COUNTY	FREEMONT
COMPANY	CANNON COAL
1975 SURFACE COAL TONNAGE	110764
1975 ACRES DISTURBED BY MINING	20
PROJECTED MAXIMUM ANNUAL TONNAGE	0
FIRST YEAR AT MAXIMUM TONNAGE	0
NUMBER OF PITS	1
MINE OPENING YEAR	1973
REMAINING MINE LIFE	0
1975 MINE EMPLOYMENT	22
STRIP RATIO(CU YD PER TON)	13.2
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	13
TOPOGRAPHY	ROLLING
ALTITUDE	6000
PREMINING LANDUSE(S)	CATTLE GRAZING-MINING
PRODUCTIVITY(ACRES PER AUM)	5.50
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

CORELY SEA

SEAM NAME	UNKNOWN
AVERAGE THICKNESS	4
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	BITUMINOUS
RTU	0
PERCENT SULFUR	.0
PERCENT ASH	.0

MARKET
 TOTAL NUMBER OF SEAMS SURFACE MINED
 THICKNESS OF ALL SEAMS SURFACE MINED
 UNDERGROUND MINING OF THE SAME SEAMS
 BLEND COAL TO MEET CONTRACT SPECS.
 MINE MOUTH POWER PLANT
 ASH DISPOSAL ON MINE SITE
 PERCENT DIP OF COAL

ELECTRIC UTILITY-DOMESTIC

1
 4
 NO
 NO
 NO
 NO
 12

MINE NAME

 CORELY S&A

AQUIFER IN OVERBURDEN OR COAL
 TYPE OF AQUIFER
 STRATA CONTAINING AQUIFER
 FUNCTION OF AQUIFER STRATA
 DEPTH TO WATER IN NEARBY WELLS
 PREMINING WELL YIELD (GAL PER MIN)
 USE OF NEARBY WELLS
 DIVERSION DITCHES TO CONTROL RUNOFF
 STREAM DIVERSION
 PUMP PIT
 SEDIMENT BASINS
 CHEMICAL TREATMENT OF DRAINAGE
 RESTORE COUNTRY
 MAX PERCENT SLOPE ON BOX CUT SPOTLS
 MAX PERCENT SLOPE ON OTHER SPCLLS
 REDUCE LAST-CUT HIGHWALL
 MAX HEIGHT OF LAST-CUT HIGHWALL
 MAX SLOPE ON REDUCED HIGHWALL
 GRADING EQUIPMENT

NO DATA
 NO DATA
 NO DATA
 NO DATA
 ABOVE THE COAL
 5
 DOMESTIC-LIVESTOCK
 NO
 NO
 NO
 NO
 NO
 YES
 33
 33
 YES
 70
 33
 DOZER

MINE NAME

CORELY S&A

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EPCSON CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL-BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

CORELY S&A

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS

MINE NAME	PIT NAME
CORELY SEA	MAIN

PIT ORIENTATION	STRIKELINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	AFEA
NUMBER OF SEAMS	1
NUMBER OF OVERBURDEN LIFTS	2
STRIPPING SUBSYSTEM	DUAL
STRIPPING EQUIPMENT	DRAGLINE-SCRAPER-DOZER
AVERAGE OVERBURDEN DEPTH	60
AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
AVERAGE INTERBURDEN DEPTH	0
POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
PIT LENGTH	1250
PIT WIDTH	200
DO INCLINES DRCF SHARPLY INTO PIT	NO
DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME	PIT NAME
CORELY SGA	MAIN

EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
DRAGLINE	N	1	2	60
SCRAPER	N	2	25	0
DOZER	N	3	0	0

MINE NAME

CRAIG

STATE	COL CRADO
COUNTY	MOFFAT
COMPANY	UTAH INTERVL
1975 SURFACE CCAL TONNAGE	C
1975 ACRES DISTURBED BY MINING	0
PROJECTED MAXIMUM ANNUAL TONNAGE	2900000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	3
MINE OPENING YEAR	1976
REMAINING MINE LIFE	37
1975 MINE EMPLOYMENT	0
STRIP RATIO(CU YD PER TON)	7.8
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	HILLY
ALTITUDE	7000
PREMINING LANDUSE(S)	CROPLAND-CATTLE AND SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	10.0
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME

CRAIG

SEAM NAME	UNKNOWN
AVERAGE THICKNESS	12
SEAM NAME	Q SEAM
AVERAGE THICKNESS	4
TYPE OF CCAL	BITUMINOUS
BTU	0
PERCENT SULFUR	.0
PERCENT ASH	.0

MARKET		ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2	
THICKNESS OF ALL SEAMS SURFACE MINED	16	
UNDERGROUND MINING OF THE SAME SEAMS	NO	
BLEND COAL TO MEET CONTRACT SPECS.	YES	
MINE MOUTH POWER PLANT	YES	
ASH DISPOSAL ON MINE SITE	NO	
PERCENT DIP OF COAL	12	

MINE NAME		

CRAIG		

AQUIFER IN OVERBURDEN OR COAL	YES	
TYPE OF AQUIFER	CONFINED	
STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN-COAL	
FUNCTION OF AQUIFER STRATA	RECHARGE	
DEPTH TO WATER IN NEARBY WELLS	NO DATA	
PREMINING WELL YIELD (GAL PER MIN)	0	
USE OF NEARBY WELLS	NO DATA	
DIVERSION DITCHES TO CONTROL RUNOFF	YES	
STREAM DIVERSION	YES	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	NO	
RESTORE CONTOUR	YES	
MAX PERCENT SLOPE ON BOX CUT SPOILS	33	
MAX PERCENT SLOPE ON OTHER SPOILS	20	
REDUCE LAST-CUT HIGHWALL	YES	
MAX HEIGHT OF LAST-CUT HIGHWALL	120	
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR	
GRADING EQUIPMENT	DOZER	

MINE NAME

CRAIG

TERRACE SPOIL	YES
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	COVER CROP
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	IF NECESSARY
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

CRAIG

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

PIT NAME

ALL

PIT ORIENTATION	DIPLINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	AREA
NUMBER OF SEAMS	2
NUMBER OF OVERBURDEN LIFTS	1
STRIPPING SUBSYSTEM	SINGLF
STRIPPING EQUIPMENT	DRAGLINE
AVERAGE OVERBURDEN DEPTH	100
AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
AVERAGE INTERBURDEN DEPTH	35
POSITION WHEN STRIPPING INTERBURDEN	SPOIL
LGTHX	0
PIT WIDTH	100
DO INCLINES DROP SHARPLY INTO PIT	NO
DISTANCE BETWEEN INCLINES (FEET)	0

BOOM LENGTH
(FEET) -----
320

CAPACITY
(CU YD)

NO OF UNITS

3

MCDEL

P752

EQUIPMENT TYPE -----
DRAGLINE

PIT NAME

ALL

MINE NAME

CRAIG

MINE NAME

EDNA

STATE	COLORADO
COUNTY	ROUTT
COMPANY	P&M
1975 SURFACE CCAL TONNAGE	760381
1975 ACRES DISTURBED BY MINING	80
PROJECTED MAXIMUM ANNUAL TONNAGE	1100000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1946
REMAINING MINE LIFE	15
1975 MINE EMPLOYMENT	52
STRIP RATIO(CU YD PER TON)	8.0
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	20
TOPOGRAPHY	HILLY
ALTITUDE	8000
PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	8.00
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME

EDNA

SEAM NAME	WADGE
AVERAGE THICKNESS	6
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	BITUMINOUS
BTU	10850
PERCENT SULFUR	.0
PERCENT ASH	7.0

MARKET
 TOTAL NUMBER OF SEAMS SURFACE MINED 1
 THICKNESS OF ALL SEAMS SURFACE MINED 6
 UNDERGROUND MINING OF THE SAME SEAMS NO
 BLEND COAL TO MEET CONTRACT SPECS. NO
 MINE MOUTH POWER PLANT NO
 ASH DISPOSAL ON MINE SITE NO
 PERCENT DIP OF COAL 12

INDUSTRIAL-ELECTRIC UTILITY

MINE NAME

EDNA

AQUIFER IN OVERBURDEN OR COAL NO
 TYPE OF AQUIFER NOT APPLICABLE
 STRATA CONTAINING AQUIFER NOT APPLICABLE
 FUNCTION OF AQUIFER STRATA NOT APPLICABLE
 DEPTH TO WATER IN NEARBY WELLS NO WELLS
 PREMINING WELL YIELD (GAL PER MIN) 0
 USE OF NEARBY WELLS NO
 DIVERSION DITCHES TO CONTROL RUNOFF NO
 STREAM DIVERSION NO
 PUMP PIT NO
 SEDIMENT BASINS YES
 CHEMICAL TREATMENT OF DRAINAGE NO
 RESTORE CONTOUR YES
 MAX PERCENT SLOPE ON BOX CUT SPOILS APPROXIMATE ORIGINAL CONTOUR
 MAX PERCENT SLOPE ON OTHER SPOILS APPROXIMATE ORIGINAL CONTOUR
 REDUCE LAST-CUT HIGHWALL YES
 MAX HEIGHT OF LAST-CUT HIGHWALL 100
 MAX SLOPE ON REDUCED HIGHWALL 33
 GRADING EQUIPMENT DOZER

MINE NAME

EDNA

TERRACE SPOIL	NO	
MECHANICAL SPOIL MANIPULATION	NO	
TOPSOIL	YES	
TOPSOIL AND SUBSOIL SEGREGATED	NO	
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY	
EROSION CONTROL ON STOCKPILES	IF NECESSARY	
TOPSOILING EQUIPMENT	SCRAPER	
DEPTH REPLACED (INCHES)	12	
BORROW TOPSOIL	NO	
SEEDING METHOD	DRILL	
PLANT TYPES USED FOR REVEGETATION	GRASSES-L EGUMES-TREES-SHRUBS	
PRIMARILY NATIVE GRASSES FOR RANGE	YES	
SOIL AMENDMENTS	NO	
MULCH	NO	
IRRIGATION	NO	
NO OF IRRIGATED GROWING SEASONS	NO	
DEDICATED RECLAMATION EQUIPMENT	0	
SEGRATION OF PROBLEM STRATA	YES	
	NO	

MINE NAME

EDNA

STUDIES UNDERTAKEN AT MINE	REVEGETATION
SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION

MINE NAME
EDNA

PIT NAME
MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
1
SINGLE
DRAGLINE
55
0
0
NOT APPLICABLE
2500
100
NO
0

MINE NAME
EDNA

PIT NAME
MAIN

EQUIPMENT TYPE
DRAGLINE

MODEL
BE

NO OF UNITS
1

CAPACITY
(CU YD)
40

BOOM LENGTH
(FEET)
215

MINE NAME

ENERGY

STATE
COUNTY
COMPANY
1975 SURFACE CCAL TONNAGE
1975 ACRES DISTURBED BY MINING
PROJECTED MAXIMUM ANNUAL TONNAGE
FIRST YEAR AT MAXIMUM TONNAGE
NUMBER OF PITS
MINE OPENING YEAR
REMAINING MINE LIFE
1975 MINE EMPLOYMENT
STRIP RATIO(CU YD PER TON)
SURFACE RIGHTS OWNER(S)
MINERAL RIGHTS OWNER(S)
AVERAGE ANNUAL PRECIPITATION
TOPOGRAPHY
ALTITUDE
PREMINING LANDUSE(S)
PRODUCTIVITY(ACRES PER AUM)
POSTMINING LANDUSE(S)

COLORADO
ROUTT
ENERGY FUELS
2603404
250
500000
1977
4
1962
20
186
6.0
PRIVATE
PRIVATE-FEDERAL-STATE
16
HILLY
7100
CROPLAND-CATTLE GRAZING
5.50
CROPLAND-CATTLE GRAZING

MINE NAME

ENERGY

SEAM NAME
AVERAGE THICKNESS
SEAM NAME
AVERAGE THICKNESS
TYPE OF COAL
BTU
PERCENT SULFUR
PERCENT ASH

WADGE
9
FISH CREEK
4
BITUMINOUS
11000
.4
6.0

ELECTRIC UTILITY	
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	14
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	27

MINE NAME

ENERGY

AQUIFER IN OVERBURDEN OR COAL TYPE OF AQUIFER STRATA CONTAINING AQUIFER FUNCTION OF AQUIFER STRATA DEPTH TO WATER IN NEARBY WELLS PREMINING WELL YIELD (GAL PER MIN) USE OF NEARBY WELLS DIVERSION DITCHES TO CONTROL RUNOFF STREAM DIVERSION PUMP PIT SEDIMENT BASINS CHEMICAL TREATMENT OF DRAINAGE RESTORE CONTOUR MAX PERCENT SLOPE ON BOX CUT SPOILS MAX PERCENT SLOPE ON OTHER SPOILS REDUCE LAST-CUT HIGHWALL MAX HEIGHT OF LAST-CUT HIGHWALL MAX SLOPE ON REDUCED HIGHWALL GRADING EQUIPMENT	YES CONFINED CONSOLIDATED OVERBURDEN-COAL RECHARGE BELOW THE CCAL 0 DOMESTIC-LIVESTOCK NO YES YES YES NO YES APPROXIMATE ORIGINAL CONTOUR APPROXIMATE ORIGINAL CONTOUR YES 12C 33 DOZER
YES CONFINED CONSOLIDATED OVERBURDEN-COAL RECHARGE BELOW THE CCAL 0 DOMESTIC-LIVESTOCK NO YES YES YES NO YES APPROXIMATE ORIGINAL CONTOUR APPROXIMATE ORIGINAL CONTOUR YES 12C 33 DOZER	YES CONFINED CONSOLIDATED OVERBURDEN-COAL RECHARGE BELOW THE CCAL 0 DOMESTIC-LIVESTOCK NO YES YES YES NO YES APPROXIMATE ORIGINAL CONTOUR APPROXIMATE ORIGINAL CONTOUR YES 12C 33 DOZER

MINE NAME

ENERGY

TFRRACE SPOIL	NO
MECHANICAL SPCIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CCNTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	18
BORROW TOPSOIL	NO
SEEDING MFTHOD	DRILL-BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	IF NECESSARY
MULCH	IF NECESSARY
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGRATION OF PROBLEM STRATA	NO

MINE NAME

ENERGY

STUDIES UNDERTAKEN AT MINE	REVEGETATION-OVERBURDEN
SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION
	ERCSICN AND SEDIMENTATION

MINE NAME

ENERGY

PIT NAME

AREA 1

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

DIPLINE
19
AREA
1
1
SINGLE
DRAGLINE
60
0
0
NOT APPLICABLE
3000
85
NO
1500

MINE NAME

ENERGY

PIT NAME

AREA 2

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

DIPLINE
13
AREA
1
1
SINGLE
DRAGLINE
60
0
0
NOT APPLICABLE
3000
85
NO
1500

MINE NAME

ENERGY

PIT NAME

MINE 2

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES CRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
48
AREA
1
1
SINGLE
DRAGLINE
30
0
0
NOT APPLICABLE
3000
85
NO
1500

MINE NAME

ENERGY

PIT NAME

MINE 3

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
20
AREA
1
1
SINGLE
SCRAPER
40
0
0
NOT APPLICABLE
2000
70
NO
1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
ENERGY	AREA 1	DRAGLINE	BE77C	1	21	265
	AREA 2	DRAGLINE	M7400	1	14	215
	MINE 2	DRAGLINE	M4600	2	8	120
	MINE 3	SCRAPER	N	0	0	0

MINE NAME

MARR NO1

STATE	COLORADO
COUNTY	JACKSON
COMPANY	TMC COAL
1975 SURFACE COAL TONNAGE	237476
1975 ACRES DISTURBED BY MINING	5
PROJECTED MAXIMUM ANNUAL TONNAGE	0
FIRST YEAR AT MAXIMUM TONNAGE	0
NUMBER OF PITS	1
MINE OPENING YEAR	1974
REMAINING MINE LIFE	0
1975 MINE EMPLOYMENT	36
STRIP RATIO(CU YD PER TON)	2.5
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	12
TOPOGRAPHY	ROLLING
ALTITUDE	8100
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	9.00
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

MARR NO1

SEAM NAME	SUDDUTH
AVERAGE THICKNESS	55
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	10800
PERCENT SULFUR	.5
PERCENT ASH	8.0

MINE NAME

MARR NO1

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

NO
NO
YES
NO
YES
NO
SCRAPER
5
NO
DRILL
GRASSES
YES
NO
NO
NO
0
NO
NO

MINE NAME

MARR NO1

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS
REVEGETATION
WIND EROSION

MINE NAME

MARR NOI

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
MODIFIED OPEN PIT
1
1
DUAL
SCRAPER-DOZER
150
0
0
NOT APPLICABLE
1500
300
NOT APPLICABLE
0

MINE NAME

MARR NOI

PIT NAME

MAIN

EQUIPMENT TYPE
SCRAPER
DOZER

MCDEL
N
CATCS

NO OF UNITS
2
1

CAPACITY
(CU YD)
30
0

BOOM LENGTH
(FEET)
0
0

MINE NAME

NUCLA

STATE	COLORADO
COUNTY	MONTE ROSE
COMPANY	PEABODY
1975 SURFACE COAL TONNAGE	104580
1975 ACRES DISTURBED BY MINING	15
PROJECTED MAXIMUM ANNUAL TONNAGE	105000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	1
MINE OPENING YEAR	1963
REMAINING MINE LIFE	0
1975 MINE EMPLOYMENT	18
STRIP RATIO(CU YD PER TON)	5.4
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	8
TOPOGRAPHY	ROLLING
ALTITUDE	5600
PREMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE AND SHEEP
PRODUCTIVITY(ACRES PER AUM)	5.33
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

SEAM NAME	UPPER BENCH
AVERAGE THICKNESS	2
SEAM NAME	LOWER BENCH
AVERAGE THICKNESS	4
TYPE OF COAL	BITUMINOUS
BTU	11500
PERCENT SULFUR	.8
PERCENT ASH	9.0

MINE NAME

NUCLA

ELECTRIC UTILITY

TOTAL NUMBER CF SEAMS SURFACE MINED
THICKNESS OF ALL SEAMS SURFACE MINED
UNDERGROUND MINING OF THE SAME SEAMS
BLEND COAL TO MEET CONTRACT SPECS.
MINE MOUTH POWER PLANT
WASH DISPOSAL IN MINE SITE
PERCENT DIP CF COAL

MINE NAME -----
NUCLA

AQUIFER IN OVERBURDEN OR COAL TYPE OF AQUIFER	YES
STRATA CONTAINING AQUIFER	CONFINED
FUNCTION CF AQUIFER STRATA	CONSOLIDATED OVERBURDEN-COAL
DEPTH TO WATER IN NEARBY WELLS	DISCHARGE
PREMINING WELL YIELD (GAL PER MIN)	ABOVE THE CCAL
USE OF NEARBY WELLS	3
DIVERSION DITCHES TO CONTROL RUNOFF	DOMESTIC-LIVESTOCK
STREAM DIVERSION	YES
PUMP PIT	NO
SEDIMENT BASINS	NO
CHEMICAL TREATMENT OF DRAINAGE	YES
RESTORE CONTOUR	NO
MAX PERCENT SLOPE ON BOX CUT SPILLS	YES
MAX PERCENT SLOPE ON OTHER SPILLS	4
REDUCE LAST-CUT HIGHWALL	4
MAX HEIGHT OF LAST-CUT HIGHWALL	YES
MAX SLOPE ON REDUCED HIGHWALL	50
GRADING EQUIPMENT	APPROXIMATE ORIGINAL CONTOUR DOZER

MINE NAME

NUCLA

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	4
BORROW TOPSOIL	NO
SEEDING METHOD	BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	NO
DEDICATED RECLAMATION EQUIPMENT	0
SEGREGATION OF PROBLEM STRATA	YES
	YES

MINE NAME

NUCLA

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS
	SALINE SOILS
	DARK COLORED SPOILS

MINE NAME

PIT NAME

NUCLA

MAIN

PIT ORIENTATION
 PERCENT OF MINE TONNAGE FROM PIT
 MINING METHOD
 NUMBER OF SEAMS
 NUMBER OF OVERBURDEN LIFTS
 STRIPPING SUBSYSTEM
 STRIPPING EQUIPMENT
 AVERAGE OVERBURDEN DEPTH
 AVG DEPTH OF UNCONSOLIDATED MATERIAL
 AVERAGE INTERBURDEN DEPTH
 POSITION WHEN STRIPPING INTERBURDEN
 LGTHX
 PIT WIDTH
 DO INCLINES ORCP SHARPLY INTO PIT
 DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
 100
 AREA
 2
 1
 SINGLE
 DRAGLINE
 35
 10
 8
 INTERBURDEN
 1000
 80
 NC
 0

MINE NAME

PIT NAME

NUCLA

MAIN

EQUIPMENT TYPE
 NO OF UNITS
 MODEL
 RESW

CAPACITY
 (CU YD)
 0

BOOM LENGTH
 (FEET)
 0

DRAGLINE

1

RESW

0

0

MINE NAME

SENECA

STATE	COLORADO
COUNTY	ROUTT
COMPANY	PEABODY
1975 SURFACE COAL TONNAGE	710313
1975 ACRES DISTURBED BY MINING	57
PROJECTED MAXIMUM ANNUAL TONNAGE	1500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1964
REMAINING MINE LIFE	28
1975 MINE EMPLOYMENT	29
STRIP RATIO (CU YD PER TON)	4.2
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	HILLY
ALTITUDE	7000
PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
PRODUCTIVITY (ACRES PER AUM)	8.00
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME

SENECA

SEAM NAME	WADGE
AVERAGE THICKNESS	12
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	BITUMINOUS
BTU	12500
PERCENT SULFUR	.5
PERCENT ASH	.0

TOTAL NUMBER OF SEAMS SURFACE MINED
THICKNESS OF ALL SEAMS SURFACE MINED
UNDERGROUND MINING OF THE SAME SEAMS
BLEND COAL TO MEET CONTRACT SPECS.
MINE MOUTH POWER PLANT
WASH DISPOSAL ON MINE SITE
PERCENT DIP OF COAL

1
12
NO
NO
YES
NO
24

SENECA

AQUIFER IN OVERBURDEN CR COAL
TYPE OF AQUIFER
STRATA CONTAINING AQUIFER
FUNCTION OF AQUIFER STRATA
DEPTH TO WATER IN NEARBY WELLS
PREMINING WELL YIELD (GAL PER MIN)
USE OF NEARBY WELLS
DIVERSION DITCHES TO CONTROL PUMP
STREAM DIVERSION
PUMP PIT
SEDIMENT BASINS
CHEMICAL TREATMENT OF DRAINAGE
RESTORE CONTROL
MAX PERCENT SLOPE ON BOX CUT SPILLS
MAX PERCENT SLOPE ON OTHER SPILLS
REDUCE LAST-CUT HIGHWALL
MAX HEIGHT OF LAST-CUT HIGHWALL
MAX SLOPE ON REDUCED HIGHWALL
GRADING EQUIPMENT

YES
 CONFINED
 CONSOLIDATED OVERBURDEN-COAL
 RECHARGE
 NO DATA
 0
 NO DATA
 YES
 NO
 YES
 YES
 NO
 YES
 33
 25
 YES
 100
 33
 DOZER

MINE NAME

SENECA

TERRACE SPOIL	NO	IF NECESSARY
MECHANICAL SPOIL MANIPULATION	YES	
TOPSOIL	NO	
TOPSOIL AND SUBSOIL SEGREGATED	IF NECESSARY	
STOCKPILE TOPSOILING MATERIAL	COVER CROP	
EROSION CONTROL ON STOCKPILES	SCRAPER	
TOPSOILING EQUIPMENT	13	
DEPTH REPLACED (INCHES)	NO	
BORROW TOPSOIL	BROADCAST-AERIAL	
SEEDING METHOD	GRASSES-LEGUMES-TREES-SHRUBS	
PLANT TYPES USED FOR REVEGETATION	YES	
PRIMARILY NATIVE GRASSES FOR RANGE	NO	
SOIL AMENDMENTS	NO	
MULCH	NO	
IRRIGATION	NO	
NO OF IRRIGATED GROWING SEASONS	0	
DEDICATED RECLAMATION EQUIPMENT	YES	
SEGREGATION OF PROBLEM STRATA	NO	

MINE NAME

SENECA

STUDIES UNDERTAKEN AT MINE	REVEGETATION
SIGNIFICANT ENVIRONMENTAL PROBLEMS	CLAYEY SOILS
	EROSION AND SEDIMENTATION

MINE NAME

SENECA

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
1
SINGLE
DRAGLINE
55
0
0
NOT APPLICABLE
5000
110
NO
2500

MINE NAME

SENECA

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE

MODEL

BE65CB

NO OF UNITS

1

CAPACITY
(CU YD)

15

BOOM LENGTH
(FEET)

215

MINE NAME

WILLIAMS FK

STATE COLORADO
COUNTY MCFAT
COMPANY BRA SEL & SIMMS
1975 SURFACE COAL TONNAGE 238396
1975 ACRES DISTURBED BY MINING 40
PROJECTED MAXIMUM ANNUAL TONNAGE 0
FIRST YEAR AT MAXIMUM TONNAGE 0
NUMBER OF PITS 2
MINE OPENING YEAR 1975
REMAINING MINE LIFE 10
1975 MINE EMPLOYMENT 26
STRIP RATIO (CU YD PER TON) .0
SURFACE RIGHTS OWNER(S) STATE
MINERAL RIGHTS OWNER(S) STATE
AVERAGE ANNUAL PRECIPITATION 15
TOPOGRAPHY ROLLING
ALTITUDE 600C
PREMINING LANDUSE(S) CROPLAND
PRODUCTIVITY (ACRES PER AUM) 10.0
POSTMINING LANDUSE(S) CROPLAND

UNKNOWN
9
N
0
BITUMINOUS
0
.0
.0

MINE NAME

WILLIAMS FK

SEAM NAME
AVERAGE THICKNESS
SEAM NAME
AVERAGE THICKNESS
TYPE OF COAL
BTU
PERCENT SULFUR
PERCENT ASH

MINE NAME

WILLIAMS FK

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-L EGUMES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

WILLIAMS FK

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME

WILLIAMS FK NO 1

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSLICATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
50
AREA
1
1
SINGLE
DRAGLINE
90
0
0
NCT APPLICABLE
0
0
NO
0

MINE NAME

WILLIAMS FK NO 2

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSLICATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
50
AREA
1
1
DUAL
SHOVEL-TRUCK-LOADER
6
0
0
NCT APPLICABLE
0
0
NO
0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MCDEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
WILLIAMS FK	NO 1	DRAGLINE	N	1	2	60
	NO 2	LOADER	N	0	0	0
		LOADING SHOVEL	N	0	0	0
		TRUCK	N	0	0	0

MONTANA

- BIG SKY
- COLSTRIP
- DECKER
- SARPY CREEK
- SAVAGE

MINE NAME

BIG SKY

STATE	MONTANA
COUNTY	ROSEBUD
COMPANY	PEABODY
1975 SURFACE COAL TONNAGE	2080412
1975 ACRES DISTURBED BY MINING	41
PROJECTED MAXIMUM ANNUAL TONNAGE	4000000
FIRST YEAR AT MAXIMUM TONNAGE	C
NUMBER OF PITS	1
MINE OPENING YEAR	1965
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	64
STRIP RATIO(CU YD PER TON)	2.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	3350
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	3.33
POSTMINING LANDUSE(S)	CATTLE GRAZING-WILDLIFE

MINE NAME

BIG SKY

SEAM NAME	ROSEBUD
AVERAGE THICKNESS	26
SEAM NAME	MCKAY
AVERAGE THICKNESS	9
TYPE OF COAL	SUBBITUMINOUS
BTU	8450
PERCENT SULFUR	.8
PERCENT ASH	10.4
MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	35

UNDERGROUND MINING OF THE SAME SEAMS NO
 BLEND COAL TO MEET CONTRACT SPECS. YES
 MINE MOUTH POWER PLANT NO
 ASH DISPOSAL ON MINE SITE NO
 PERCENT DIP OF COAL 2

MINE NAME

 RIG SKY

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
FUNCTION OF AQUIFER STRATA	DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW
PREMINING WELL YIELD (GAL PER MIN)	7
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	20
MAX PERCENT SLOPE ON OTHER SPOILS	20
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	125
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

BIG SKY

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

YES
YES
YES
NO
IF NECESSARY
IF NECESSARY
SCRAPER
12
NO
DRILL
GRASSES-LEGUMES-TREES
YES
NO
NO
IF FEASIBLE
1
YES
YES

MINE NAME

BIG SKY

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION-HYDROLOGY
IMPERMEABLE MATERIAL
IMPERMEABLE MATERIAL
WIND EROSION

MINE NAME
BIG SKY

PIT NAME
MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSCATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
DRAGLINE
57
0
18
SPOIL
5300
125
YES
2500

MINE NAME
BIG SKY

PIT NAME
MAIN

EQUIPMENT TYPE
DRAGLINE

MCDEL
W7800

NO OF UNITS
1

CAPACITY
(CU YD)
30

MINE NAME

COLSTRIP

STATE	MONTANA
COUNTY	ROSEBUD
COMPANY	W ENERGY
1975 SURFACE COAL TONNAGE	6432344
1975 ACRES DISTURBED BY MINING	175
PROJECTED MAXIMUM ANNUAL TONNAGE	19100000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	2
MINE OPENING YEAR	1968
REMAINING MINE LIFE	35
1975 MINE EMPLOYMENT	285
STRIP RATIO(CU YD PER TON)	3.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	3400
PREMINING LANDUSE(S)	CATTLE GRAZING-MINING
PRODUCTIVITY(ACRES PER AUM)	4.42
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

COLSTRIP

SEAM NAME	ROSEBUD
AVERAGE THICKNESS	25
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	8700
PERCENT SULFUR	0.7
PERCENT ASH	8.9
MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	25

MINE NAME

COLSTRIP

UNDERGROUND MINING OF THE SAME SEAMS	NO	
BLEND COAL TO MEET CONTRACT SPECS.	NO	
MINE MOUTH POWER PLANT	YES	
ASH DISPOSAL ON MINE SITE	NO	
PERCENT DIP OF COAL	2	

AQUIFER IN OVERBURDEN OR COAL	YES	
TYPE OF AQUIFER	CONFINED	
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN-COAL	
FUNCTION OF AQUIFER STRATA	DISCHARGE	
DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW THE COAL	
PREMINING WELL YIELD (GAL PER MIN)	7	
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK	
DIVERSION DITCHES TO CONTROL RUNOFF	YES	
STREAM DIVERSION	NO	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	NO	
RESTORE CONTOUR	YES	
MAX PERCENT SLOPE ON BOX CUT SPCLLS	20	
MAX PERCENT SLOPE ON OTHER SPCLLS	20	
REDUCE LAST-CUT HIGHWALL	YES	
MAX HEIGHT OF LAST-CUT HIGHWALL	200	
MAX SLOPE ON REDUCED HIGHWALL	33	
GRADING EQUIPMENT	DOZER	

MINE NAME

COLSTRIP

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER-DOZER
DEPTH REPLACED (INCHES)	40
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	IF NECESSARY
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

COLSTRIP

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-MINING
SIGNIFICANT ENVIRONMENTAL PROBLEMS	IMPERMEABLE MATERIAL IN OVERBURDEN
	WIND EROSION

MINE NAME	PIT NAME	
COLSTRIP	PIT 1	
	PIT ORIENTATION	STRIKELINE
	PERCENT OF MINE TONNAGE FROM PIT	60
	MINING METHOD	AREA
	NUMBER OF SEAMS	1
	NUMBER OF OVERBURDEN LIFTS	3
	STRIPPING SUBSYSTEM	DUAL
	STRIPPING EQUIPMENT	STRIP SHOVEL-SCRAPER
	AVERAGE OVERBURDEN DEPTH	100
	AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
	AVERAGE INTERBURDEN DEPTH	0
	POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
	PIT LENGTH	0
	PIT WIDTH	135
	DO INCLINES DROP SHARPLY INTO PIT	YES
	DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	
COLSTRIP	PIT 2	
	PIT ORIENTATION	STRIKELINE
	PERCENT OF MINE TONNAGE FROM PIT	40
	MINING METHOD	AREA
	NUMBER OF SEAMS	1
	NUMBER OF OVERBURDEN LIFTS	1
	STRIPPING SUBSYSTEM	SINGLE
	STRIPPING EQUIPMENT	DRAGLINE
	AVERAGE OVERBURDEN DEPTH	75
	AVG DEPTH OF UNCONSOLIDATED MATERIAL	0
	AVERAGE INTERBURDEN DEPTH	0
	POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
	PIT LENGTH	8500
	PIT WIDTH	225
	DO INCLINES DROP SHARPLY INTO PIT	YES
	DISTANCE BETWEEN INCLINES (FEET)	2500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
COLSTRIP	PIT 1	LOADING SHOVEL	M1050	1	25	150
		DOZER	FAHD41	0	0	0
		SCRAPER	CAT631	0	0	0
	PIT 2	DRAGLINE	M8050	1	60	310

MINE NAME

DECKER

STATE	MONTANA
COUNTY	BIG HORN
COMPANY	DECKER
1975 SURFACE (CAL TONNAGE)	9208752
1975 ACRES DISTURBED BY MINING	100
PROJECTED MAXIMUM ANNUAL TONNAGE	16000000
FIRST YEAR AT MAXIMUM TONNAGE	1978
NUMBER OF PITS	1
MINE OPENING YEAR	1972
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	248
STRIP RATIO(CU YD PER TON)	1.8
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	12
TOPOGRAPHY	ROLLING
ALTITUDE	3750
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.92
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

DECKER

SEAM NAME	DIETZ
AVERAGE THICKNESS	52
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE CF CCAL	SUBBITUMINOUS
BTU	9600
PERCENT SULFUR	.4
PERCENT ASH	3.7

MARKET	ELECTRIC UTILITY
TOTAL NUMBER CF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	52
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP CF COAL	0

MINE NAME

DECKER

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN-COAL
FUNCTION CF AQUIFER STRATA	DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE IN AND BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	24
USE OF NEARBY WELLS	MINE-DOMESTIC-LIVESTOCK-COMMERCIAL
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	IF NECESSARY
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	4
MAX PERCENT SLOPE ON OTHER SPOILS	4
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	215
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

DECKER

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	20
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	YES
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

DECKER

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY INTERBURDEN

MINE NAME
DECKER

PIT NAME
MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE

100
AREA
1
3
DUAL
DRAGLINE-SCRAPER
98
58
0
NCT APPLICABLE
14750
125
NO
2500

MINE NAME
DECKER

PIT NAME
MAIN

EQUIPMENT TYPE
DRAGLINE
SCRAPER

MODEL
BE1300
CAT637

NO OF UNITS
1
3

CAPACITY
(CU YD)
41
22

BOOM LENGTH
(FEET)
285
0

MINE NAME

SARPY CREEK

STATE	MONTANA
COUNTY	BIG HORN
COMPANY	WESTMORELAND
1975 SURFACE COAL TONNAGE	4048082
1975 ACRES DISTURBED BY MINING	46
PROJECTED MAXIMUM ANNUAL TONNAGE	6500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1974
REMAINING MINE LIFE	100
1975 MINE EMPLOYMENT	110
STRIP RATIO(CU YD PER TON)	2.2
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S)	INDIAN-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	3500
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	3.33
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

SARPY CREEK

SEAM NAME	ROSEBUD
AVERAGE THICKNESS	30
SEAM NAME	ROBINSON
AVERAGE THICKNESS	20
TYPE OF COAL	SUBBITUMINOUS
BTU	8450
PERCENT SULFUR	.7
PERCENT ASH	11.0

ELECTRIC UTILITY

TOTAL NUMBER OF SEAMS SURFACE MINED
THICKNESS OF ALL SEAMS SURFACE MINED
UNDERGROUND MINING OF THE SAME SEAMS
BLEND COAL TO MEET CONTRACT SPECS.
MINE MOUTH POWER PLANT
ASH DISPOSAL CA MINE SITE
PERCENT DIP OF COAL

MINE NAME

SARPY CREEK

AQUIFER IN OVERBURDEN OR COAL
TYPE OF AQUIFER

STRATA CONTAINING AQUIFER

FUNCTION OF AQUIFER STRATA

DEPTH TO WATER IN NEARBY WELLS

PREMINING WELL YIELD (GAL PER MIN)

USE OF NEARBY WELLS

DIVERSION DITCHES TO CONTROL RUNOFF

STREAM DIVERSION

jump pit

SEDIMENT BASINS

CHEMICAL TREATMENT OF DRAINAGE

RESTORE CONTOUR

MAX PERCENT SLOPE ON BOX CUT SPILLS

MAX PERCENT SLOPE ON OTHER SPOILS

REDUCE LAST-CUT HIGHWALL

MAX HEIGHT OF LAST-CLT HIGHWALL

MAX SLOPE ON REDUCED HIGHWAY

RADING EQUIPMENT

YES

CONFINED

CONSOLIDATED OVERPURDEN-COAL

DISCHARGE

BELOW THE COAL

20

DOMESTIC-LIVESTOCK

YES

END

YES

YFS

YES

UN

YES

20

500

2005

SE

CC

33

DOZER

MINE NAME

SARPY CREEK

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

NO
YES
YES
NO
IF NECESSARY
IF NECESSARY
SCRAPER-DOZER
30
NO
DRILL-BROADCAST
GRASSES-LEGUMES-TREES-SHRUBS
YES
FERTILIZER
NO
NO
0
YES
YES

MINE NAME

SARPY CREEK

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

HYDROLOGY-OVERBURDEN CHARACTERISTICS
HIGH SAR AND CLAYEY INTERBURDEN
TOXIC METALS IN OVERBURDEN

MINE NAME

SARPY CREEK

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
4
1
SINGLE
DRAGLINE
40
0
60
SPOIL
1000
220
YES
2500

MINE NAME

SARPY CREEK

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE

MODEL

M82CC

NO OF UNITS

1

CAPACITY
(CU YD)

75

BOOM LENGTH
(FEET)

325

MINE NAME

SAVAGE

STATE	MONTANA
COUNTY	RICHLAND
COMPANY	KNIFE RIVER
1975 SURFACE (CAL TONNAGE	298324
1975 ACRES DISTURBED BY MINING	16
PROJECTED MAXIMUM ANNUAL TONNAGE	300000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	1
MINE OPENING YEAR	1950
REMAINING MINE LIFE	20
1975 MINE EMPLOYMENT	28
STRIP RATIO(CU YD PER TON)	3.8
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL--STATE
AVERAGE ANNUAL PRECIPITATION	13
TOPOGRAPHY	ROLLING
ALTITUDE	2150
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	4.58
POSTMINING LANDUSE(S)	CATTLE GRAZING-WILDLIFE

MINE NAME

SAVAGE

SEAM NAME	PUST
AVERAGE THICKNESS	17
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	LIGNITE
BTU	6500
PERCENT SULFUR	.5
PERCENT ASH	7.4

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	17
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLENDED COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

MINE NAME

SAVAGE

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
PREMINING WELL YIELD (GAL PER MIN)	3
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	NO
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE COUNTRY	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	20
MAX PERCENT SLOPE ON OTHER SPOILS	20
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	100
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

SAVAGE

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	36
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	YES
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

SAVAGE

STUDIES UNDERTAKEN AT MINE	REVEGETATION-GRADING METHODS
SIGNIFICANT ENVIRONMENTAL PROBLEMS	WIND EROSION

MINE NAME

SAVAGE

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
2
DUAL
DRAGLINE-DOZER
70
66
0
NOT APPLICABLE
1900
130
NO
2500

MINE NAME

SAVAGE

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE
DOZER
DOZER

MODEL

BE7W
CATD8
INTD25

NO OF UNITS

1
1
1

CAPACITY (CU YD)

7
0
0

BOOM LENGTH (FEET)

165
0
0

NEW MEXICO

- MCKINLEY
- NAVAJO
- SAN JUAN
- YORK CANYON

MINE NAME

MCKINLEY

STATE	NEW MEXICO
COUNTY	MCKINLEY
COMPANY	P&M
1975 SURFACE COAL TONNAGE	468000
1975 ACRES DISTURBED BY MINING	80
PROJECTED MAXIMUM ANNUAL TONNAGE	500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	2
MINE OPENING YEAR	1962
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	90
STRIP RATIO(CU YD PER TON)	7.0
SURFACE RIGHTS OWNER(S)	INDIAN-PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S)	INDIAN-PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	12
TOPOGRAPHY	ROLLING
ALTITUDE	7000
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	8.92
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

MCKINLEY

SEAM NAME	FUCHSIA
AVERAGE THICKNESS	10
SEAM NAME	BLUF
AVERAGE THICKNESS	5
TYPE OF COAL	BITUMINOUS
BTU	10500
PERCENT SULFUR	.7
PERCENT ASH	15.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	4
THICKNESS OF ALL SEAMS SURFACE MINED	20
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	5

MINE NAME ----- MCKINLEY	AQUIFER IN OVERBURDEN OR COAL TYPE OF AQUIFER STRATA CONTAINING AQUIFER FUNCTION OF AQUIFER STRATA DEPTH TO WATER IN NEARBY WELLS PREMINING WELL YIELD (GAL PER MIN) USE OF NEARBY WELLS DIVERSION DITCHES TO CONTROL RUNOFF STREAM DIVERSION PUMP PIT SEDIMENT BASINS CHEMICAL TREATMENT OF DRAINAGE RESTORE CONTOUR MAX PERCENT SLOPE ON BOX CUT SPOILS MAX PERCENT SLOPE ON OTHER SPOILS REDUCE LAST-CUT HIGHWALL MAX HEIGHT OF LAST-CUT HIGHWALL MAX SLOPE ON REDUCED HIGHWALL GRADING EQUIPMENT	NO NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE BELOW THE COAL 0 DOMESTIC-LIVESTOCK YES NO NO YES NO YES 33 33 NO 120 NOT REDUCED DOZER
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MINE NAME

MCKINLEY

TERRACE SPOIL	IF NECESSARY
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL--BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES--LEGUMES--TREES--SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	YES
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

MCKINLEY

STUDIES UNDERTAKEN AT MINE	REVEGETATION
SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME

MCKINLEY

PIT NAME

9508

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
PIT LENGTH
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
38
AREA
2
1
DUAL
SHOVEL-DRAGLINE
60
0
15
SPOIL
0
70
NOT APPLICABLE
0

MINE NAME

MCKINLEY

PIT NAME

1370

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
PIT LENGTH
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
62
AREA
4
1
SINGLE
DRAGLINE
120
0
15
NOT APPLICABLE
0
100
NOT APPLICABLE
0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
MCKINLEY	1370	DRAGLINE	BE1370	1	55	320
	950B	LOADING SHOVEL	BE950B	1	33	0
		DRAGLINE	BE7W	1	7	220

MINE NAME

NAVAJO

STATE	NEW MEXICO
COUNTY	SAN JUAN
COMPANY	UTAH
1975 SURFACE COAL TONNAGE	6073000
1975 ACRES DISTURBED BY MINING	400
PROJECTED MAXIMUM ANNUAL TONNAGE	7000000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITS	5
MINE OPENING YEAR	1963
REMAINING MINE LIFE	20
1975 MINE EMPLOYMENT	430
STRIP RATIO(CU YD PER TON)	5.0
SURFACE RIGHTS OWNER(S)	INDIAN
MINERAL RIGHTS OWNER(S)	INDIAN
AVERAGE ANNUAL PRECIPITATION	6
TOPOGRAPHY	ROLLING
ALTITUDE	5000
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	9.08
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

NAVAJO

SEAM NAME	NO. 8
AVERAGE THICKNESS	15
SEAM NAME	NO. 6
AVERAGE THICKNESS	8
TYPE CF COAL	SUBBITUMINOUS
BTU	9200
PERCENT SULFUR	.7
PERCENT ASH	23.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	28
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLENDED COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	4
AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	CONSOLIDATED OVERBURDEN
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPILLS	33
MAX PERCENT SLOPE ON OTHER SPILLS	15
REDUCE LAST-CUT HIGHWALL	NO
MAX HEIGHT OF LAST-CUT HIGHWALL	200
MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
GRADING EQUIPMENT	DOZER-RAY GC GIANT

MINE NAME

NAVAJO

MINE NAME

NAVAJO

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SPEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

YES
NO
YES
NO
IF NECESSARY
NO
SCRAPER
6
IF NECESSARY
DRILL-BROADCAST
GRASSES-SHRUBS
YES
FERTILIZER-GYPSUM
YES
YES
2
YES
NO

MINE NAME

NAVAJO

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
HIGH SAR AND
SALINE SOILS
WIND EROSION
CLAYEY OVERBURDEN

MINE NAME

NAVAJO

PIT NAME

BE1350

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
35
AREA
3
1
SINGLE
DRAGLINE
90
0
20
SPOIL
0
140
NO
2500

MINE NAME

NAVAJO

PIT NAME

M7930

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
30
AREA
3
1
SINGLE
DRAGLINE
90
0
20
SPOIL
0
140
NO
2500

MINE NAME

NAVAJO

PIT NAME

M7920

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
35
AREA
3
1
SINGLE
DRAGLINE
90
0
20
SPOIL
0
140
NO
2500

MINE NAME

NAVAJO

PIT NAME

BE1350
M7900
M7920

EQUIPMENT TYPE

DRAGLINE
DRAGLINE
DRAGLINE
MODEL

BE1350
M7900
M7920
NO OF UNITS

1
1
1

CAPACITY
(CU YD)

50
45
50
BOOM LENGTH
(FEET)

285
250
300

MINE NAME

SAN JUAN

STATE	NEW MEXICO
COUNTY	SAN JUAN
COMPANY	WESTERN COAL
1975 SURFACE CCAL TONNAGE	1246000
1975 ACRES DISTURBED BY MINING	50
PROJECTED MAXIMUM ANNUAL TONNAGE	5800000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1973
REMAINING MINE LIFE	35
1975 MINE EMPLOYMENT	65
STRIP RATIO(CU YD PER TON)	7.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	7
TOPOGRAPHY	ROLLING
ALTITUDE	5400
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	9.67
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

SAN JUAN

SEAM NAME	NO. 8
AVERAGE THICKNESS	15
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF CCAL	SUBBITUMINOUS
BTU	9700
PERCENT SULFUR	.6
PERCENT ASH	18.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	15
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT OF ITS
PERCENT DIP OF COAL	5

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE COUNTRY	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	33
MAX PERCENT SLOPE ON OTHER SPOILS	15
REDUCE LAST-CUT HIGHWALL	NO
MAX HEIGHT OF LAST-CUT HIGHWALL	120
MAX SLOPE ON REDUCED HIGHWALL	NOT REDUCED
GRADING EQUIPMENT	DOZER

MINE NAME

SAN JUAN

MINE NAME

SAN JUAN

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	8
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	YES
IRRIGATION	YES
NO OF IRRIGATED GROWING SEASONS	1
DEDICATED RECLAMATION EQUIPMENT	YES
SEGRATION OF PROBLEM STRATA	NO

MINE NAME

SAN JUAN

STUDIES UNDERTAKEN AT MINE	REVEGETATION
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN
	SALINE SOILS
	WIND EROSION

MINE NAME

SAN JUAN

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
2
DUAL
DRAGLINE-SCRAPER
60
10
0
NCT APPLICABLE
4000
90
NO
0

MINE NAME

SAN JUAN

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE
SCRAPER
SCRAPER
SCRAPER

MODEL

M183
CAT641
CAT657
W333

NO OF UNITS

1
2
1
3

CAPACITY
(CU YD)

10
30
45
30

BOOM LENGTH
(FEET)

120
0
0
0

MINE NAME

YORK CANYON

STATE NEW MEXICO
COUNTY COL FAX
COMPANY KAI SER
1975 SURFACE (COAL TONNAGE 252000
1975 ACRES DISTURBED BY MINING 75
PROJECTED MAXIMUM ANNUAL TONNAGE 500C00
FIRST YEAR AT MAXIMUM TONNAGE 1977
NUMBER OF PITS 3
MINE OPENING YEAR 1972
REMAINING MINE LIFE 15
1975 MINE EMPLOYMENT 67
STRIP RATIO (CL YD PER TON) 5.0
SURFACE RIGHTS OWNER(S) PRIVATE
MINERAL RIGHTS OWNER(S) PRIVATE
AVERAGE ANNUAL PRECIPITATION 14
TOPOGRAPHY HILLY
ALTITUDE 7400
PREMINING LANDUSE(S) CATTLE GRAZING
PRODUCTIVITY (ACRES PER AUM) 10.0
POSTMINING LANDUSE(S) CATTLE GRAZING

MINE NAME

YORK CANYON

SEAM NAME YORK CANYON
AVERAGE THICKNESS 8
SEAM NAME N
AVERAGE THICKNESS 0
TYPE OF COAL BITUMINOUS
BTU 14340
PERCENT SULFUR .6
PERCENT ASH 8.8

MARKET METALURGICAL
 TOTAL NUMBER OF SEAMS SURFACE MINED 1
 THICKNESS OF ALL SEAMS SURFACE MINED 8
 UNDERGROUND MINING OF THE SAME SEAMS YES
 BLEND COAL TO MEET CONTRACT SPECS. NO
 MINE MOUTH POWER PLANT NO
 ASH DISPOSAL ON MINE SITE NO
 PERCENT DIP OF COAL 3

MINE NAME

 YORK CANYON

AQUIFER IN OVERBURDEN OR COAL
 TYPE OF AQUIFER NO
 STRATA CONTAINING AQUIFER NOT APPLICABLE
 FUNCTION OF AQUIFER STRATA NOT APPLICABLE
 DEPTH TO WATER IN NEARBY WELLS NOT APPLICABLE
 PREMINING WELL YIELD (GAL PER MIN) BELOW THE COAL
 USE OF NEARBY WELLS 0
 DIVERSION DITCHES TO CONTROL RUNOFF LIVESTOCK
 STREAM DIVERSION YES
 PUMP PIT YES
 SEDIMENT BASINS NO
 CHEMICAL TREATMENT OF DRAINAGE YES
 RESTORE CONTOUR NO
 MAX PERCENT SLOPE ON BOX CUT SPOILS YES
 MAX PERCENT SLOPE ON OTHER SPOILS 33
 REDUCE LAST-CUT HIGHWALL 33
 MAX HEIGHT OF LAST-CUT HIGHWALL NO
 MAX SLOPE ON REDUCED HIGHWALL 120
 GRADING EQUIPMENT NOT REDUCED
 DOZER

MINE NAME

YORK CANYON

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL

TOPSOIL AND SUBSOIL SEGREGATED

STOCKPILE TOPSOILING MATERIAL

EROSION CONTROL ON STOCKPILES

TOPSOILING EQUIPMENT

DEPTH REPLACED (INCHES)

BORROW TOPSOIL

SEEDING METHOD

PLANT TYPES USED FOR REVEGETATION

PRIMARILY NATIVE GRASSES FOR RANGE

SOIL AMENDMENTS

MULCH

IRRIGATION

NO OF IRRIGATED GROWING SEASONS

DEDICATED RECLAMATION EQUIPMENT

SEGREGATION OF PROBLEM STRATA

IF NECESSARY

YES

YES

NO

IF NECESSARY

NO

DOZER-LOADER-TRUCK

6

NO

DRILL-HYDROSEED

GRASSES-LEGUMES-SHRUBS

YES

FERTILIZER

YES

YES

1

NO

NO

MINE NAME

YORK CANYON

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION

EROSION AND SEDIMENTATION

MINE NAME	PIT NAME	PIT ORIENTATION	PERCENT OF MINE TONNAGE FROM PIT	MINING METHOD	NUMBER OF SEAMS	NUMBER OF OVERBURDEN LIFTS	STRIPPING SUBSYSTEM	STRIPPING EQUIPMENT	AVERAGE OVERBURDEN DEPTH	AVG DEPTH OF UNCONSOLIDATED MATERIAL	AVERAGE INTERBURDEN DEPTH	POSITION WHEN STRIPPING INTERBURDEN LGTHX	PIT WIDTH	DO INCLINES DROP SHARPLY INTO PIT	DISTANCE BETWEEN INCLINES (FEET)	STRIKELINE	CAPACITY (CU YD)	BOOM LENGTH (FEET)
YORK CANYON	ALL															100		
																AREA		
																1		
																1		
																DUAL		
																DOZER-LOADER		
																60		
																5		
																0		
																NCT APPLICABLE		
																1500		
																200		
																YES		
																1500		

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
YORK CANYON	ALL	DOZER	HC41	3	0	0
		DOZER	CATC9	1	0	0
		DOZER	CATD8	2	0	0
		DOZER	CATD7	1	0	0
		LCADER	D60C	1	15	0
		LCADER	CAT992	1	12	0

NORTH DAKOTA

- BEULAH
- CENTER
- GASCOYNE
- GLENHAROLD
- HUSKY
- INDIAN HEAD
- LARSON
- VELVA

MINE NAME

BEULAH

STATE NORTH DAKOTA
COUNTY MERCER
COMPANY KNIFE RIVER
1975 SURFACE CCAL TONNAGE 1316625
1975 ACRES DISTURBED BY MINING 20
PROJECTED MAXIMUM ANNUAL TONNAGE 4300000
FIRST YEAR AT MAXIMUM TONNAGE 1981
NUMBER OF PITS 7
MINE OPENING YEAR 1963
REMAINING MINE LIFE 30
1975 MINE EMPLOYMENT 69
STRIP RATIO(CU YD PER TON) 5.0
SURFACE RIGHTS OWNER(S) PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S) PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION 16
TOPOGRAPHY ROLLING
ALTITUDE 2025
PREMINING LANDUSE(S) CROP AND HAYLAND-CATTLE
PRODUCTIVITY(ACRES PER AUM) 2.83
POSTMINING LANDUSE(S) CROP AND HAYLAND-CATTLE

MINE NAME

BEULAH

SEAM NAME NO 1
AVERAGE THICKNESS 12
SEAM NAME NO 2
AVERAGE THICKNESS 6
TYPE CF CCAL LIGNITE
RTU 6800
PERCENT SULFUR 0.6
PERCENT ASH 8.0
MARKET ELECTRIC UTILITY
TOTAL NUMBER CF SEAMS SURFACE MINED 2
THICKNESS OF ALL SEAMS SURFACE MINED 18

UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERBURDEN OR COAL	NO
TYPE OF AQUIFER	NOT APPLICABLE
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	80
MAX SLOPE ON REDUCED HIGHWALL	35
GRADING EQUIPMENT	DOZER

MINE NAME

BEULAH

MINE NAME

BEULAH

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

NG
NO
YES
YES
IF NECESSARY
COVERCROP
SCRAPER
24
NO
DRILL
GRASSES-LEGUMES-TREES
YES
FERTILIZER
NO
NO
0
NO
NO

MINE NAME

BEULAH

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION-OVERBURDEN
HIGH SAR AND CLAYEY
HIGH SAR AND CLAYEY
SINK HCLES

MINE NAME

BEULAH

PIT NAME

ALL

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
PIT LENGTH
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
DRAGLINE
50
50
8
N/A
6600
120
NO
1500

MINE NAME

BEULAH

PIT NAME

ALL

EQUIPMENT TYPE

DRAGLINE
DRAGLINE

MODEL

BE500
BE40W

NO OF UNITS

1
1

CAPACITY
(CU YD)

12
17

MINE NAME

CENTER

STATE	NORTH DAKOTA
COUNTY	OLIVER
COMPANY	BAUKOLNOONAN
1975 SURFACE COAL TONNAGE	1545974
1975 ACRES DISTURBED BY MINING	50
PROJECTED MAXIMUM ANNUAL TONNAGE	4400000
FIRST YEAR AT MAXIMUM TONNAGE	1978
NUMBER OF PITS	5
MINE OPENING YEAR	1970
REMAINING MINE LIFE	50
1975 MINE EMPLOYMENT	35
STRIP RATIO(CU YD PER TON)	6.5
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	2100
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.50
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME

CENTER

SEAM NAME	HAGEL 1
AVERAGE THICKNESS	6
SEAM NAME	HAGEL 2
AVERAGE THICKNESS	12
TYPE OF COAL	LIGNITE
BTU	6650
PERCENT SULFUR	.6
PERCENT ASH	6.2
MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	18
UNDERGROUND MINING OF THE SAME SEAMS	NO

BLEND COAL TO MEET CONTRACT SPECS.
MINE MOUTH POWER PLANT
ASH DISPOSAL ON MINE SITE
PERCENT DIP OF COAL

YES
YES
MINED OUT PITS
0

MINE NAME

CENTER

AQUIFER IN OVERBURDEN OR COAL
TYPE OF AQUIFER
STRATA CONTAINING AQUIFER
FUNCTION OF AQUIFER STRATA
DEPTH TO WATER IN NEARBY WELLS
PREMINING WELL YIELD (GAL PER MIN)
USE OF NEARBY WELLS
DIVERSION DITCHES TO CONTROL RUNOFF
STREAM DIVERSION
PUMP PIT
SEDIMENT BASINS
CHEMICAL TREATMENT OF DRAINAGE
RESTORE CONTOUR
MAX PERCENT SLOPE ON BOX CUT SPOILS
MAX PERCENT SLOPE ON OTHER SPOILS
REDUCE LAST-CUT HIGHWALL
MAX HEIGHT OF LAST-CUT HIGHWALL
MAX SLOPE ON REDUCED HIGHWALL
GRADING EQUIPMENT

NO
NOT APPLICABLE
NOT APPLICABLE
NOT APPLICABLE
BELOW THE COAL
0
DOMESTIC-LIVESTOCK
NO
NO
YES
YES
NO
YES
APPROXIMATE ORIGINAL CONTOUR
APPROXIMATE ORIGINAL CONTOUR
YES
135
35
DOZER

MINE NAME

CENTER

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)

NO
NO
YES
YES
YES
NO
SCRAPER
30

BORROW TOPSOIL	NO	GRASSES-LEGUMES-TREES-SHRUBS
SEEDING METHOD	DRILL	
PLANT TYPES USED FOR REVEGETATION		
PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE	
SOIL AMENDMENTS	FERTILIZER	
MULCH	NO	
IRRIGATION	NC	
NO OF IRRIGATED GROWING SEASONS	0	
DEDICATED RECLAMATION EQUIPMENT	NO	
SEGREGATION OF PROBLEM STRATA	NO	

MINE NAME

CENTER

MINE NAME

CENTER

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
SINK HOLES

PIT NAME

MAIN

PIT ORIENTATION	STRIKELINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	AREA
NUMBER OF SEAMS	2
NUMBER OF OVERBURDEN LIFTS	1
STRIPPING SUBSYSTEM	SINGLE
STRIPPING EQUIPMENT	DRAGLINE
AVERAGE OVERBURDEN DEPTH	90
AVG DEPTH OF UNCONSOLIDATED MATERIAL	90
AVERAGE INTERBURDEN DEPTH	36
POSITION WHEN STRIPPING INTERBURDEN	SPOIL
LGTHX	4000
PIT WIDTH	100
DC INCLINES DROP SHARPLY INTO PIT	NO
DISTANCE BETWEEN INCLINES (FEET)	1500

MINE NAME

CENTER

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE

MODEL

PAGE

NO OF UNITS

1

CAPACITY
(CU YD)

21

BOOM LENGTH
(FEET)

160

MINE NAME

GASCOYNE

STATE	NORTH DAKOTA
COUNTY	BOWMAN
COMPANY	KNIFE RIVER
1975 SURFACE CCAL TONNAGE	1794018
1975 ACRES DISTURBED BY MINING	43
PROJECTED MAXIMUM ANNUAL TONNAGE	2500000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITTS	5
MINE OPENING YEAR	1950
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	63
STRIP RATIO(CU YD PER TON)	2.0
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	15
TOPOGRAPHY	FLAT
ALTITUDE	2800
PREMINING LANDUSE(S)	CROP AND HAYLAND
PRODUCTIVITY(ACRES PER AUM)	2.25
POSTMINING LANDUSE(S)	CROP AND HAYLAND

MINE NAME

GASCOYNE

SEAM NAME	LIGNITE 1
AVERAGE THICKNESS	8
SEAM NAME	8
AVERAGE THICKNESS	LIGNITE
TYPE CF CCAL	6100
BTU	1.3
PERCENT SULFUR	8.0
PERCENT ASH	

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	16
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	NO
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	FLOCCULATION-EXPERIMENTAL
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	50
MAX SLOPE ON REDUCED HIGHWALL	35
GRADING EQUIPMENT	DOZER

MINE NAME

GASCOYNE

MINE NAME

GASCOYNE

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TCP SOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	COVERCROP
TCP SOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	9
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LFGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
SOIL AMENDMENTS	FERTILIZER
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

GASCOYNE

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
	SHALLOW SOILS

MINE NAME

GASCOYNE

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
2
SINGLE
DRAGLINE
45
45
15
NCT APPLICABLE
5000
120
NO
1500

MINE NAME

GASCOYNE

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE

MCDEL

M7620

NO OF UNITS

1

CAPACITY
(CU YD)

33

BOOM LENGTH
(FEET)

235

MINE NAME

GLENHAROLD

STATE	NORTH DAKOTA
COUNTY	MERCER
COMPANY	CON SOL
1975 SURFACE COAL TONNAGE	1583872
1975 ACRES DISTURBED BY MINING	253
PROJECTED MAXIMUM ANNUAL TONNAGE	3800000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITS	2
MINE OPENING YEAR	1965
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	138
STRIP RATIO(CU YD PER TON)	7.3
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	HILLY
ALTITUDE	1500
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY (ACRES PER AUM)	1.08
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME

GLENHAROLD

SEAM NAME	NO 3-2
AVERAGE THICKNESS	4
SEAM NAME	NO 2
AVERAGE THICKNESS	10
TYPE OF COAL	LIGNITE
BTU	6780
PERCENT SULFUR	.6
PERCENT ASH	6.2

MARKET
 TOTAL NUMBER OF SEAMS SURFACE MINED 3
 THICKNESS OF ALL SEAMS SURFACE MINED 16
 UNDERGROUND MINING OF THE SAME SEAMS NO
 BLEND COAL TO MEET CONTRACT SPECS. YES
 MINE MOUTH POWER PLANT YES
 ASH DISPOSAL ON MINE SITE NO
 PERCENT DIP OF COAL 0

ELECTRIC UTILITY

MINE NAME

 GLENHAROLD

AQUIFER IN OVERBURDEN OR COAL
 TYPE OF AQUIFER NO
 STRATA CONTAINING AQUIFER NOT APPLICABLE
 FUNCTION OF AQUIFER STRATA NOT APPLICABLE
 DEPTH TO WATER IN NEARBY WELLS NOT APPLICABLE
 PREMINING WELL YIELD (GAL PER MIN) BELOW THE COAL
 USE OF NEARBY WELLS 8
 DIVERSION DITCHES TO CONTROL PUNOFF DOMESTIC-LIVESTOCK
 STREAM DIVERSION YES
 PUMP PIT NO
 SEDIMENT BASINS YES
 CHEMICAL TREATMENT OF DRAINAGE YES
 RESTORE CONTOUR NO
 MAX PERCENT SLOPE ON BOX CUT SPOILS YES
 MAX PERCENT SLOPE ON OTHER SPOILS 35
 REDUCE LAST-CUT HIGHWALL 35
 MAX HEIGHT OF LAST-CUT HIGHWALL YES
 MAX SLOPE ON REDUCED HIGHWALL 120
 GRADING EQUIPMENT 35
 DOZER

MINE NAME

GLENHARCLO

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

NO
NO
YES
YES
YES
COVERCROP
SCRAPER
40
NO
DRILL-BROADCAST
GRASSES-LEGUMES-TREES-SHRUBS
YES
FERTILIZER
NO
NO
0
YES
NO

MINE NAME

GLENHARCLO

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
HIGH SAR AND CLAYEY OVERBURDEN
HIGH SAR AND CLAYEY INTERBURDEN
SINK HOLES

MINE NAME

GLENHAROLD

PIT NAME

PIT 1

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
66
AREA
3
1
SINGLE
DRAGLINE
88
88
30
SPOIL
6000
140
NO
1500

MINE NAME

GLENHAROLD

PIT NAME

PIT 2

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
34
AREA
3
1
SINGLE
DRAGLINE
90
90
30
SPOIL
4000
125
NO
1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
GLENHAROLD	PIT 1	DRAGLINE	P762	1	60	310
	PIT 2	DRAGLINE	BE1250	1	35	250

MINE NAME

HUSKY

STATE	NORTH DAKOTA
COUNTY	STARK
COMPANY	HUSKY IND
1975 SURFACE (CAL TONNAGE	141810
1975 ACRES DISTURBED BY MINING	15
PROJECTED MAXIMUM ANNUAL TONNAGE	200000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITS	2
MINE OPENING YEAR	1929
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	11
STRIP RATIO (CU YD PER TON)	10.3
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-STATE
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTITUDE	2450
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY (ACRES PER AUM)	4.00
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME

HUSKY

SEAM NAME	NO 1
AVERAGE THICKNESS	3
SEAM NAME	NO 2
AVERAGE THICKNESS	9
TYPE OF COAL	LIGNITE
BTU	6200
PERCENT SULFUR	.5
PERCENT ASH	6.2

MARKET	CHARCOAL
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	12
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERRURDEN OR COAL TYPE OF AQUIFER	NO
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	NOT APPLICABLE
PREMINING WELL YIELD (GAL PER MIN)	BELOW THE COAL
USE OF NEARBY WELLS	0
DIVERSION DITCHES TO CONTROL RUNOFF	DOMESTIC-LIVESTOCK
STREAM DIVERSION	NO
PUMP PIT	NO
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	YES
RESTORE CONTOUR	NO
MAX PERCENT SLOPE ON BOX CUT SPOILS	YES
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
MAX HEIGHT OF LAST-CUT HIGHWALL	YES
MAX SLOPE ON REDUCED HIGHWALL	110
GRADING EQUIPMENT	35
	DOZER

MINE NAME

HUSKY

MINE NAME

HUSKY

TERRACE SPOIL NO
MECHANICAL SPCL MANIPULATION NO
TOPSOIL YES
TOPSOIL AND SUBSOIL SEGREGATED YES
STOCKPILE TOPSOILING MATERIAL YES
EROSION CONTROL ON STOCKPILES NO
TOPSOILING EQUIPMENT SCRAPER
DEPTH REPLACED (INCHES) 49
BORROW TOPSOIL NO
SEEDING METHOD DRILL
PLANT TYPES USED FOR REVEGETATION GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE NOT APPLICABLE
SOIL AMENDMENTS FERTILIZER
MULCH NO
IRRIGATION NO
NO OF IRRIGATED GROWING SEASONS 0
DEDICATED RECLAMATION EQUIPMENT NO
SEGREGATION OF PROBLEM STRATA NO

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

NONE
NONE

MINE NAME

HUSKY

MINE NAME

HUSKY

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SFAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
SCRAPER
50
50
50
NCT APPLICABLE
2500
120
NO
1000

MINE NAME

HUSKY

PIT NAME

MAIN

EQUIPMENT TYPE

SCRAPER
SCRAPER

MCDEL

CAT637
CAT627

NO OF UNITS

2
2

CAPACITY
(CU YD)

30
20

BOOM LENGTH
(FEET)

0
0

MINE NAME

INDIAN HEAD

STATE	NORTH DAKOTA
COUNTY	MERCER
COMPANY	AMERICAN
1975 SURFACE (CAL TONNAGE)	827680
1975 ACRES DISTURBED BY MINING	53
PROJECTED MAXIMUM ANNUAL TONNAGE	1300000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITS	5
MINE OPENING YEAR	1925
REMAINING MINE LIFE	100
1975 MINE EMPLOYMENT	70
STRIP RATIO(CU YD PER TON)	6.2
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-STATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	1950
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	3.33
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING-WILDLIFE

MINE NAME

INDIAN HEAD

SEAM NAME	ZAP
AVERAGE THICKNESS	9
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	LIGNITE
BTU	7080
PERCENT SULFUR	.7
PERCENT ASH	6.6

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	9
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLENDED COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN-COAL
FUNCTION OF AQUIFER STRATA	NO DATA
DEPTH TO WATER IN NEARBY WELLS	ABOVE AND IN THE COAL
PREMINING WELL YIELD (GAL PER MIN)	2
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	200
MAX SLOPE ON REDUCED HIGHWALL	35
GRADING EQUIPMENT	DOZER

MINE NAME

INDIAN HEAD

MINE NAME

INDIAN HEAD

TERRACE SPOIL	NO	
MECHANICAL SPOIL MANIPULATION	NO	
TOPSOIL	YES	
TOPSOIL AND SUBSOIL SEGREGATED	YES	
STOCKPILE TOPSOILING MATERIAL	YES	
EROSION CONTROL ON STOCKPILES	COVERCROP	
TOPSOILING EQUIPMENT	SCRAPER	
DEPTH REPLACED (INCHES)	25	
BORROW TOPSOIL	NO	
SEEDING METHOD	DRILL	
PLANT TYPES USED FOR REVEGETATION	GRASSES--LEGUMES--TREES--SHRUBS	
PRIMARILY NATIVE GRASSES FOR RANGE	YES	
SOIL AMENDMENTS	FERTILIZER	
MULCH	NO	
IRRIGATION	NO	
NO OF IRRIGATED GROWING SEASONS	0	
DEDICATED RECLAMATION EQUIPMENT	NO	
SEGREGATION OF PROBLEM STRATA	NO	

MINE NAME

INDIAN HEAD

STUDIES UNDERTAKEN AT MINE	REVEGETATION--HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN

MINE NAME
INDIAN HEAD

PIT NAME
MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
1
SINGLE
DRAGLINE
60
60
0
NOT APPLICABLE
4000
100
NO
1500

MINE NAME
INDIAN HEAD

PIT NAME
MAIN

EQUIPMENT TYPE
DRAGLINE

MODEL
PE8COW

NO OF UNITS
1

CAPACITY
(CU YD)
28

BOOM LENGTH
(FEET)
195

MINE NAME

LARSON

STATE	NORTH DAKOTA
COUNTY	BURKE
COMPANY	BAUKOLNOONAN
1975 SURFACE COAL TONNAGE	406108
1975 ACRES DISTURBED BY MINING	39
PROJECTED MAXIMUM ANNUAL TONNAGE	406108
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	3
MINE OPENING YEAR	1925
REMAINING MINE LIFE	15
1975 MINE EMPLOYMENT	23
STRIP RATIO(CU YD PER TON)	5.4
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	15
TOPOGRAPHY	FLAT
ALTITUDE	1920
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	3.67
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME

LARSON

SEAM NAME	NOONAN
AVERAGE THICKNESS	6
SEAM NAME	N
AVERAGE THICKNESS	12
TYPE OF COAL	LIGNITE
BTU	6800
PERCENT SULFUR	.5
PERCENT ASH	6.2

MARKET	INDUSTRIAL
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	12
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERBURDEN OR COAL	NO	NOT APPLICABLE
TYPE OF AQUIFER	NOT APPLICABLE	
STRATA CONTAINING AQUIFER	NOT APPLICABLE	
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE	
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL	
PREMINING WELL YIELD (GAL PER MIN)	0	
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK	
DIVERSION DITCHES TO CONTROL RUNOFF	YES	
STREAM DIVERSION	NO	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	YES	
RESTORE CONTOUR	NO	
MAX PERCENT SLOPE ON BOX CUT SPOILS	YES	
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR	
REDUCE LAST-CUT HIGHWALL	APPROXIMATE ORIGINAL CONTOUR	
MAX HEIGHT OF LAST-CUT HIGHWALL	YES	
MAX SLOPE ON REDUCED HIGHWALL	50	
GRADING EQUIPMENT	35	
	DOZER	

MINE NAME

LARSON

MINE NAME

LARSON

TERRACE SPOIL	NO
MECHANICAL SPECIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	DRAGLINE-SCRAPER
DEPTH REPLACED (INCHES)	18
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	NOT APPLICABLE
SOIL AMENDMENTS	FERTILIZER
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

LARSON

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYFY OVERBURDEN

MINE NAME

LARSON

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF CVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
1
SINGLF
DRAGLINE
35
35
0
NCT APPLICABLE
2500
90
NO
1500

MINE NAME

LARSON

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE

MODEL

A

NO OF UNITS

1

CAPACITY
(CU YD)

11

BOOM LENGTH
(FEET)

140

MINE NAME

VELVA

STATE	NORTH DAKOTA
COUNTY	WAR C
COMPANY	CONSOL
1975 SURFACE CCAL TONNAGE	323866
1975 ACRES DISTURBED BY MINING	30
PROJECTED MAXIMUM ANNUAL TONNAGE	600000
FIRST YEAR AT MAXIMUM TONNAGE	1976
NUMBER OF PITS	1
MINE OPENING YEAR	1928
REMAINING MINE LIFE	20
1975 MINE EMPLOYMENT	37
STRIP RATIO(CU YD PER TON)	4.4
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	16
TOPOGRAPHY	ROLLING
ALTITUDE	1950
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.42
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING

MINE NAME

VELVA

SEAM NAME	COTEAU
AVERAGE THICKNESS	14
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF CCAL	LIGNITE
BTU	6600
PERCENT SULFUR	.4
PERCENT ASH	6.2

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	14
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	0

AQUIFER IN OVERRURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	ABOVE AND BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	80
MAX SLOPE ON REDUCED HIGHWALL	35
GRADING EQUIPMENT	DOZER

MINE NAME

VELVA

MINE NAME

VELVA

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	COVERCROP
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	44
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES-TREES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

VELVA

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY OVERBURDEN

MINE NAME	PIT NAME			STRIKELINE
VELVA	MAIN			100
		PIT ORIENTATION	PERCENT OF MINE TONNAGE FROM PIT	AREA
		MINING METHOD		1
		NUMBER OF SEAMS	NUMBER OF OVERBURDEN LIFTS	1
		STRIPPING SUBSYSTEM	STRIPPING EQUIPMENT	SINGLE
		STRIPPING EQUIPMENT	AVERAGE OVERBURDEN DEPTH	DRAGLINE
		AVERAGE OVERBURDEN DEPTH	AVG DEPTH OF UNCONSLICATED MATERIAL	70
		AVG DEPTH OF UNCONSLICATED MATERIAL	AVERAGE INTERBURDEN DEPTH	70
		AVERAGE INTERBURDEN DEPTH	POSITION WHEN STRIPPING INTERBURDEN	0
		POSITION WHEN STRIPPING INTERBURDEN	LGTHX	NCT APPLICABLE
		PIT WIDTH		1300
		DO INCLINES DROP SHARPLY INTO PIT		90
		DISTANCE BETWEEN INCLINES (FEET)		NO
				1500

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
VELVA	MAIN	DRAGLINE	M7400	1	13	175

WYOMING

- BELLE AYR SOUTH
- BIG HORN NO 1
- CORDERO
- DAVE JOHNSTON
- FMC MINE
- JACOBS RANCH
- JIM BRIDGER
- KEMMERER
- MEDICINE BOW
- NORTH RAWHIDE
- RIMROCK
- ROSEBUD
- SEMINOE NO 1
- SEMINOE NO 2
- THUNDER
- WYODAK MINE

BELLE AYS S.

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	AMAX
1975 SURFACE COAL TONNAGE	3288000
1975 ACRES DISTURBED BY MINING	28
PROJECTED MAXIMUM ANNUAL TONNAGE	15000000
FIRST YEAR AT MAXIMUM TONNAGE	1977
NUMBER OF PITS	1
MINE OPENING YEAR	1972
REMAINING MINE LIFE	21
1975 MINE EMPLOYMENT	75
STRIP RATIO(CU YD PER TON)	1.0
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTITUDE	4500
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.50
POSTMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
SEAM NAME	WYODAK
AVERAGE THICKNESS	70
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	8800
PERCENT SULFUR	0.6
PERCENT ASH	5.3
MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	70
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	1

BELLE AYS S. (Continued)

AQUIFER IN OVERBURDEN OR COAL TYPE OF AQUIFER	YES	
STRATA CONTAINING AQUIFER	UNCONFINED	
FUNCTION OF AQUIFER STRATA	UNCONSOLIDATED OVERBURDEN	
DEPTH TO WATER IN NEARBY WELLS	STREAMBANK STORAGE	
PREMINING WELL YIELD (GAL PER MIN)	ABOVE AND BELOW THE COAL	
USE OF NEARBY WELLS	0	
DIVERSION DITCHES TO CONTROL RUNOFF	DOMESTIC-LIVESTOCK	
STREAM DIVERSION	YES	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	YES	
RESTORE CONTOUR	NO	
MAX PERCENT SLOPE ON BOX CUT SPOILS	YES	
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR	
REDUCE LAST-CUT HIGHWALL	APPROXIMATE ORIGINAL CONTOUR	
MAX HEIGHT OF LAST-CUT HIGHWALL	YES	
MAX SLOPE ON REDUCED HIGHWALL	200	
GRADING EQUIPMENT	APPROXIMATE ORIGINAL CONTOUR	
TERRACE SPOIL	DOZER	
MECHANICAL SPOIL MANIPULATION	NO	
TOPSOIL	YES	
TOPSOIL AND SUBSOIL SEGREGATED	YES	
STOCKPILE TOPSOILING MATERIAL	YES	
EROSION CONTROL ON STOCKPILES	IF NECESSARY	
TOPSOILING EQUIPMENT	COVER CROP	
DEPTH REPLACED (INCHES)	SCRAPER	
BORROW TOPSOIL	6	
SEEDING METHOD	NO	
PLANT TYPES USED FOR REVEGETATION	DRILL	
PRIMARILY NATIVE GRASSES FOR RANGE	GRASSES-LEGUMES-TREES-SHRUBS	
SOIL AMENDMENTS	YES	
MULCH	NO	
IRRIGATION	NO	
NO OF IRRIGATED GROWING SEASONS	NO	
DEDICATED RECLAMATION EQUIPMENT	0	
SEGREGATION OF PROBLEM STRATA	YES	
	YES	

BELLE AYS S. (Continued)

STUDIES UNDERTAKEN AT MINE REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS IMPERMEABLE MATERIAL IN OVERBURDEN

PIT NAME	STRIKELINE
-----	-----
MAIN	100
PIT ORIENTATION	MODIFIED OPEN PIT
PERCENT OF MINE TONNAGE FROM PIT	1
MINING METHOD	2
NUMBER OF SEAMS	DUAL
NUMBER OF OVERBURDEN LIFTS	SHOVEL-TRUCK-SCRAPER
STRIPPING SUBSYSTEM	70
STRIPPING EQUIPMENT	70
AVERAGE OVERBURDEN DEPTH	0
AVG DEPTH OF UNCONSOLIDATED MATERIAL	NOT APPLICABLE
AVERAGE INTERBURDEN DEPTH	3650
POSITION WHEN STRIPPING INTERBURDEN	300
LGTHX	NOT APPLICABLE
PIT WIDTH	0
DC INCLINES DROP SHARPLY INTO PIT	
DISTANCE BETWEEN INCLINES (FEET)	

PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	ROOM LENGTH (FEET)
-----	-----	-----	-----	-----	-----
MAIN	LOADING SHOVEL	PE	2	21	0
	TRUCK	N	5	120	0
	SCRAPER	N	2	15	0

MINE NAME

BIG HORN NO1

STATE	WYOMING
COUNTY	SHERIDAN
COMPANY	BIG HORN
1975 SURFACE COAL TONNAGE	787123
1975 ACRES DISTURBED BY MINING	10
PROJECTED MAXIMUM ANNUAL TONNAGE	1500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	2
MINE OPENING YEAR	1944
REMAINING MINE LIFE	15
1975 MINE EMPLOYMENT	80
STRIP RATIO(CU YD PER TON)	2.3
SURFACE RIGHTS OWNER(S)	PRIVATE-STATE
MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	15
TOPOGRAPHY	HILLY
ALTITUDE	3500
PREMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE
PRODUCTIVITY(ACRES PER AUM)	1.67
POSTMINING LANDUSE(S)	IRRIGATED CROPLAND-CATTLE
SEAM NAME	DIF122
AVERAGE THICKNESS	10
SEAM NAME	D3-MONARCH
AVERAGE THICKNESS	40
TYPE OF COAL	SUBBITUMINOUS
BTU	9300
PERCENT SULFUR	0.7
PERCENT ASH	5.8
MARKET	ELECTRIC UTILITY-DOMESTIC
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	50
UNDERGROUND MINING OF THE SAME SEAMS	YES

MINE NAME

BIG HORN NO1

BLEND COAL TO MEET CONTRACT SPECS.
 MINE MOUTH POWER PLANT
 ASH DISPOSAL ON MINE SITE
 PERCENT DIP OF COAL

NO
 NO
 NO
 9

MINE NAME

BIG HORN NO1

AQUIFER IN OVERBURDEN OR COAL
 TYPE OF AQUIFER
 STRATA CONTAINING AQUIFER
 FUNCTION OF AQUIFER STRATA
 DEPTH TO WATER IN NEARBY WELLS
 PREMINING WELL YIELD (GAL PER MIN)
 USE OF NEARBY WELLS
 DIVERSION DITCHES TO CONTROL RUNOFF
 STREAM DIVERSION
 PUMP PIT
 SEDIMENT BASINS
 CHEMICAL TREATMENT OF DRAINAGE
 RESTORE CONTOUR
 MAX PERCENT SLOPE ON BOX CUT SPOILS
 MAX PERCENT SLOPE ON OTHER SPOILS
 REDUCE LAST-CUT HIGHWALL
 MAX HEIGHT OF LAST-CUT HIGHWALL
 MAX SLOPE ON REDUCED HIGHWALL
 GRADING EQUIPMENT

YES
 UNCONFINED
 UNCONSOLIDATED OVERBURDEN
 STREAMBANK STORAGE
 ABOVE AND BELOW
 0
 DOMESTIC-LIVESTOCK
 YES
 YES
 YES
 YES
 NO
 YES
 40
 40
 IMPROVEMENT
 200
 APPROXIMATE ORIGINAL
 DITCHER

MINE NAME

BIG HORN NO1

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
PRECISION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES-TREES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	YES
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

BIG HORN NO1

STUDIES UNDERTAKEN AT MINE	NONE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	HIGH SAR AND CLAYEY

MINE NAME	PIT NAME
BIG HORN NUL	MAIN

PIT ORIENTATION	TONNAGE FROM PIT	STRIKELINE
PERCENT OF MINE MINING METHOD		-100
NUMBER OF SEAMS		AREA
NUMBER OF OVERBURDEN LIFTS		2
STRIPPING SUBSYSTEM		4
STRIPPING EQUIPMENT		DUAL
AVERAGE OVERBURDEN DEPTH		SCRAPER-DOZER
AVG DEPTH OF UNCONSOLIDATED MATERIAL		125
AVERAGE INTERBURDEN DEPTH		0
POSITION WHEN STRIPPING INTERBURDEN LGTHX		10
PIT WIDTH		N/A
DO INCLINES DROP SHARPLY INTO PIT		1320
DISTANCE BETWEEN INCLINES (FEET)		300
		NO
		0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)
BIG HORN NO1	MAIN	SCRAPER	N	0	0
		DOZER	N	0	0

MINE NAME

CORDERO

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	SUN OIL
1975 SURFACE COAL TONNAGE	0
1975 ACRES DISTURBED BY MINING	0
PROJECTED MAXIMUM ANNUAL TONNAGE	12000000
FIRST YEAR AT MAXIMUM TONNAGE	1981
NUMBER OF PITS	1
MINE OPENING YEAR	1976
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	0
STRIP RATIO(CU YD PER TON)	2.2
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	FEDERAL
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTITUDE	4600
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	4.33
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

CORDERO

SEAM NAME	WYODAK
AVERAGE THICKNESS	54
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
RTU	81.85
PERCENT SULFUR	.3
PERCENT ASH	6.0

ELECTRIC UTILITY

1 54 NO NO NO NO 3

CORDERO

YES
 CONFINED-UNCONFINED
 CONSOLIDATED AND UNCONSOLIDATED
 DISCHARGE
 IN THE COAL
 3
 DOMESTIC-LIVESTOCK
 YES
 YES
 YES
 YES
 YES
 NO
 YES
 20
 20
 20
 YES
 20C
 33
 DOZER

MINE NAME

CORDERO

TERRACE SPOIL	IF NECESSARY
MECHANICAL SPOIL MANIPULATION	IF NECESSARY
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	8
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL-HYDROSEED
PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANCE	YES
SOIL AMENDMENTS	IF NECESSARY
MULCH	YES WHEN HYDROSEEDING
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	IF NECESSARY

MINE NAME

CORDERC

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY-OVERBURDEN
SIGNIFICANT ENVIRONMENTAL PROBLEMS	NONE

MINE NAME

CORDERO

PIT NAME

MAIN

PIT ORIENTATION	PERCENT OF MINE TONNAGE FROM PIT	MINING METHOD	NUMBER OF SEAMS	NUMBER OF OVERBURDEN LIFTS	STRIPPING SUBSYSTEM	STRIPPING EQUIPMENT	AVERAGE OVERBURDEN DEPTH	AVG DEPTH OF UNCONSOLIDATED MATERIAL	AVERAGE INTERBURDEN DEPTH	POSITION WHEN STRIPPING INTERBURDEN	LGTHX	PIT WIDTH	DO INCLINES DROP SHARPLY INTO PIT	DO INCLINES BETWEEN INCLINES (FEET)
STRIKELINE	100	MODIFIED OPEN PIT	1	3	DUAL	SHOVEL-TRUCK	130	0	0	NOT APPLICABLE	2000	200	YES	1500

MINE NAME

CORDERO

PIT NAME

MAIN

EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
LOADING SHOVEL	N	2	20	0
TRUCK	N	6	120	0

MINE NAME

D. JOHNSTON

STATE	WYOMING
COUNTY	CONVERSE
COMPANY	PP AND L
1975 SURFACE COAL TONNAGE	3231649
1975 ACRES DISTURBED BY MINING	60
PROJECTED MAXIMUM ANNUAL TONNAGE	3230000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	2
MINE OPENING YEAR	1962
REMAINING MINE LIFE	35
1975 MINE EMPLOYMENT	119
STRIP RATIO(CU YD PER TON)	3.3
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	FEDERAL
AVERAGE ANNUAL PRECIPITATION	11
TOPOGRAPHY	ROLLING
ALTITUDE	5800
PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	3.33
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

SEAM NAME	BADGER
AVERAGE THICKNESS	16
SEAM NAME	SCHOOL
AVERAGE THICKNESS	35
TYPE OF COAL	SUBBITUMINOUS
BTU	7500
PERCENT SULFUR	.5
PERCENT ASH	12.0

MINE NAME

D. JOHNSTON

MARKET

TOTAL NUMBER OF SEAMS SURFACE MINED
THICKNESS OF ALL SEAMS SURFACE MINED
UNDERGROUND MINING OF THE SAME SEAMS
BLEND COAL TO MEET CONTRACT SPECS.
MINE MOUTH POWER PLANT
ASH DISPOSAL ON MINE SITE
PERCENT DIP OF COAL

ELECTRIC UTILITY

2
51
NO
NO
YES
NO
7

MINE NAME

D. JOHNSTON

AQUIFER IN OVERBURDEN OR COAL

TYPE OF AQUIFER
STRATA CONTAINING AQUIFER
FUNCTION OF AQUIFER STRATA
DEPTH TO WATER IN NEARBY WELLS
PREMINING WELL YIELD (GAL PER MIN)
USE OF NEARBY WELLS
DIVERSION DITCHES TO CONTROL RUNOFF
STREAM DIVERSION
PUMP PIT

NO
NOT APPLICABLE
NOT APPLICABLE
NOT APPLICABLE
BELOW THE COAL
0

DOMESTIC-LIVESTOCK

YES
NO

SEDIMENT BASINS

CHEMICAL TREATMENT OF DRAINAGE
RESTORE CONTOUR

MAX PERCENT SLOPE ON BOX CUT SPOILS
MAX PERCENT SLOPE ON OTHER SPOILS
REDUCE LAST-CUT HIGHWALL
MAX HEIGHT OF LAST-CUT HIGHWALL
MAX SLOPE ON REDUCED HIGHWALL
GRADING EQUIPMENT

YES
YES
NO
YES
33
33
YES
140

APPROXIMATE ORIGINAL CONTOUR
DOZER-DPA GLINE

MINE NAME

D. JOHNSTON

TERRACE SPOTL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	YES
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	NO
SOIL AMENDMENTS	NO
MULCH	YES
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	NO

REVEGETATION-GRADING METHODS
NONE

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

MINE NAME

D. JOHNSTON

MINE NAME

D. JOHNSON

PIT NAME

BADGER

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
30
AREA
1
1
SINGLE
DRAGLINE
60
5
0
NOT APPLICABLE
10000
140
NO
3400

MINE NAME

D. JOHNSON

PIT NAME

SCHOOL

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
70
AREA
1
1
SINGLE
DRAGLINE
120
5
0
NOT APPLICABLE
25000
140
NO
3400

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
D. JOHNSTON	PADGER	DRAGLINE	P752	1	39	261
	SCHOOL	DRAGLINE	P752	1	39	261

MINE NAME

FMC MINE

STATE	WYOMING
COUNTY	LINCOLN
COMPANY	FMC CORP
1975 SURFACE COAL TONNAGE	C
1975 ACRES DISTURBED BY MINING	C
PROJECTED MAXIMUM ANNUAL TONNAGE	1800000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1976
REMAINING MINE LIFE	20
1975 MINE EMPLOYMENT	0
STRIP RATIO(CU YD PER TON)	3.3
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE
AVERAGE ANNUAL PRECIPITATION	10
TOPOGRAPHY	HILLY
ALTITUDE	6850
PREMINING LANDUSE(S)	SHEEP GRAZING-WILDLIFE
PRODUCTIVITY(ACRES PER AUM)	5.92
POSTMINING LANDUSE(S)	SHEEP GRAZING-WILDLIFE

MINE NAME

FMC MINE

SEAM NAME	NO. 1
AVERAGE THICKNESS	50
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	9500
PERCENT SULFUR	0.6
PERCENT ASH	4.8

MARKET	CHEMICAL	COKE
TOTAL NUMBER OF SFAMS SURFACE MINED	1	
THICKNESS OF ALL SEAMS SURFACE MINED	50	
UNDERGROUND MINING OF THE SAME SEAMS	NO	
BLEND COAL TO MEET CONTRACT SPECS.	NO	
MINE MOUTH POWER PLANT	NO	
ASH DISPOSAL ON MINE SITE	NO	
PERCENT DIP OF COAL	36	

AQUIFER IN OVERBURDEN OR COAL	YES	
TYPE OF AQUIFER	CONFINED	
STRATA CONTAINING AQUIFER	CCAL	
FUNCTION OF AQUIFER STRATA	RECHARGE	
DEPTH TO WATER IN NEARBY WELLS	NO WELLS	
PREMINING WELL YIELD (GAL PER MIN)	0	
USE OF NEARBY WELLS	YES	
DIVERSION DITCHES TO CONTROL RUNOFF	YES	
STREAM DIVERSION	YES	
PUMP PIT	YES	
SEDIMENT BASINS	YES	
CHEMICAL TREATMENT OF DRAINAGE	NO	
RESTORE CONTOUR	NO	
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL	CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL	CONTOUR
REDUCE LAST-CUT HIGHWALL	PARTIAL BACKFILL	
MAX HEIGHT OF LAST-CUT HIGHWALL	45C	
MAX SLOPE ON REDUCED HIGHWALL	NC DATA	
GRADING EQUIPMENT	DOZER	

MINE NAME

FMC MINE

MINE NAME

FMC MINE

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	COVER CROP
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL-BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	IF NECESSARY
MULCH	IF NECESSARY
IRRIGATION	IF FEASIBLE
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

FMC MINE

STUDIES UNDERTAKEN AT MINE	NCNE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	NCNE

MINE NAME

JACOB'S RANCH

STATE
COUNTY
COMPANY

1975 SURFACE COAL TONNAGE
1975 ACRES DISTURBED BY MINING
PROJECTED MAXIMUM ANNUAL TONNAGE
FIRST YEAR AT MAXIMUM TONNAGE
NUMBER OF PITS

MINE OPENING YEAR
REMAINING MINE LIFE
1975 MINE EMPLOYMENT
STRIP RATIO (CL YD PER TON)
SURFACE RIGHTS OWNER(S)
MINERAL RIGHTS OWNER(S)
AVERAGE ANNUAL PRECIPITATION

TOPOGRAPHY
ALTITUDE

PREMINING LANDUSE(S)
PRODUCTIVITY (ACRES PER AUM)
POSTMINING LANDUSE(S)

WYOMING
CAMPBELL
KERR MCGEE

C
O
14000000
1983

1
1977
22
C

2.1

PRIVATE-FEDERAL
PRIVATE-FEDERAL

14

ROLLING

477C

CATTLE GRAZING

4.00

CATTLE GRAZING

MINE NAME

JACOB'S RANCH

SEAM NAME

AVERAGE THICKNESS

SEAM NAME

AVERAGE THICKNESS

TYPE OF COAL

BTU

PERCENT SULFUR

PERCENT ASH

U. WYODAK
8

L. WYODAK
43

SUBBITUMINOUS

8525

.5

5.8

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	57
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME

JACOBS RANCH

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	NO DATA
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	33
MAX PERCENT SLOPE ON OTHER SPOILS	33
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	17C
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
GRADING EQUIPMENT	DOZER

MINE NAME

JACOBS RANCH

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL

TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT

DEPTH REPLACED (INCHES)

BORROW TOPSOIL

SEEDING METHOD

PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE

SOIL AMENDMENTS

MULCH

IRRIGATION

NO OF IRRIGATED GROWING SEASONS

DEDICATED RECLAMATION EQUIPMENT

SEGREGATION OF PROBLEM STRATA

IF NECESSARY
IF NECESSARY
YES

YES

IF NECESSARY

IF NECESSARY

SCRAPER

6

NO

DRILL

GRASSES

YES

IF NECESSARY

IF NECESSARY

NO

0

YES

IF NECESSARY

MINE NAME

JACOBS RANCH

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION-HYDROLOGY-OVERBURDEN
SALINE SOILS
CLAYEY SOILS

MINE NAME

JACOBS RANCH

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
MODIFIED OPEN PIT
3
3
DUAL
SHOVEL-TRUCK
110
10
20
NOT APPLICABLE
1200
300
NOT APPLICABLE
0

MINE NAME

JACOBS RANCH

PIT NAME

MAIN

EQUIPMENT TYPE

LOADING SHOVEL
TRUCK

MODEL

N
N

NO OF UNITS

0
0

CAPACITY
(CU YD)

21
170

BOOM LENGTH
(FEET)

0
0

MINE NAME

JIM BRIDGER

STATE WYOMING
COUNTY SWEETWATER
COMPANY BRIDGER COAL
1975 SURFACE COAL TONNAGE 1862125
1975 ACRES DISTURBED BY MINING 113
PROJECTED MAXIMUM ANNUAL TONNAGE 7500000
FIRST YEAR AT MAXIMUM TONNAGE 1980
NUMBER OF PITS 1
MINE OPENING YEAR 1974
REMAINING MINE LIFE 30
1975 MINE EMPLOYMENT 22
STRIP RATIO(CU YD PER TON) 4.9
SURFACE RIGHTS OWNER(S) PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S) PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION 8
TOPOGRAPHY ROLLING
ALTITUDE 6300
PREMINING LANDUSE(S) SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM) 8.00
POSTMINING LANDUSE(S) SHEEP GRAZING

MINE NAME

JIM BRIDGER

SEAM NAME DEADMAN
AVERAGE THICKNESS 28
SEAM NAME N
AVERAGE THICKNESS 0
TYPE OF COAL SUBBITUMINOUS
BTU 9350
PERCENT SULFUR .5
PERCENT ASH 10.0

MARKET
 TOTAL NUMBER OF SEAMS SURFACE MINED 1
 THICKNESS OF ALL SEAMS SURFACE MINED 28
 UNDERGROUND MINING OF THE SAME SEAMS NO
 BLEND COAL TO MEET CONTRACT SPECS. NO
 MINE MOUTH POWER PLANT YES
 ASH DISPOSAL ON MINE SITE MINED OUT PITS
 PERCENT DIP OF COAL 4

ELECTRIC UTILITY

MINE NAME

 JIM BRIDGER

AQUIFER IN OVERBURDEN OR COAL
 TYPE OF AQUIFER YES
 STRATA CONTAINING AQUIFER CONFINED
 FUNCTION OF AQUIFER STRATA COAL
 DEPTH TO WATER IN NEARBY WELLS RECHARGE
 PREMINING WELL YIELD (GAL PER MIN) NO WELLS
 USE OF NEARBY WELLS 0
 DIVERSION DITCHES TO CONTROL RUNOFF NO
 STREAM DIVERSION NO
 PUMP PIT YES
 SEDIMENT BASINS YES
 CHEMICAL TREATMENT OF DRAINAGE NO
 RESTORE COUNTRY YES
 MAX PERCENT SLOPE ON BOX CUT SPOILS 33
 MAX PERCENT SLOPE ON OTHER SPOILS 33
 REDUCE LAST-CUT HIGHWALL YES
 MAX HEIGHT OF LAST-CUT HIGHWALL 200
 MAX SLOPE ON REDUCED HIGHWALL 33
 GRADING EQUIPMENT DOZER-CRAGLINE

MINE NAME

JIM BRIDGER

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

NO
YES
YES
NO
IF NECESSARY
NO
SCRAPER
6
NO
DRILL
GRASSES
YES
NO
YES
NO
0
NO
NO

MINE NAME

JIM BRIDGER

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
SHALLOW SOILS
SALINE SOILS

MINE NAME

JIM BRIDGER

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
1
1
SINGLE
DRAGLINE
100
0
0
NOT APPLICABLE
25000
200
NO
0

MINE NAME

JIM BRIDGER

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE
DRAGLINE

MODEL

M82CC
F732

NO OF UNITS

1
1

CAPACITY
(CU YD)

70
18

BOOM LENGTH
(FEET)

325
196

MINE NAME

KEMMERER

STATE	WYOMING
COUNTY	LINCOLN
COMPANY	KEMMERER
1975 SURFACE CCAL TONNAGE	2733091
1975 ACRES DISTURBED BY MINING	115
PROJECTED MAXIMUM ANNUAL TONNAGE	4500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	2
MINE OPENING YEAR	1950
REMAINING MINE LIFE	55
1975 MINE EMPLOYMENT	390
STRIP RATIO(CU YD PER TON)	4.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	10
TOPOGRAPHY	HILLY
ALTITUDE	7200
PREMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING-MINING
PRODUCTIVITY(ACRES PER AUM)	5.92
POSTMINING LANDUSE(S)	CATTLE AND SHEEP GRAZING

MINE NAME

KEMMERER

SEAM NAME	NO. 1
AVERAGE THICKNESS	93
SEAM NAME	NO. 2
AVERAGE THICKNESS	30
TYPE OF CCAL	SUBBITUMINOUS
BTU	8500
PERCENT SULFUR	.5
PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	30
THICKNESS OF ALL SEAMS SURFACE MINED	300
UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	33

MINE NAME

KEMMERER

AQUIFER IN OVERBURDEN OR COAL	NO
TYPE OF AQUIFER	NOT APPLICABLE
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	NO WELLS
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	YES
DIVERSION DITCHES TO CONTROL PUNCTURE	NO
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	NO
MAX PERCENT SLOPE ON BOX CUT SPCLLS	33
MAX PERCENT SLOPE ON OTHER SPCLLS	33
REDUCE LAST-CUT HIGHWALL	NO
MAX HEIGHT OF LAST-CUT HIGHWALL	1005
MAX SLOPE ON REDUCED HIGHWALL	200
GRADING EQUIPMENT	DOZER

MINE NAME

KEMMERER

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	4
BORROW TOPSOIL	NO
SEEDING METHOD	BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES-SHRUBS
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	YES
IRRIGATION	YES
NO OF IRRIGATED GROWING SEASONS	AS NECESSARY
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

KEMMERER

STUDIES UNDERTAKEN AT MINE	REVEGETATION
SIGNIFICANT ENVIRONMENTAL PROBLEMS	SHALLOW SOILS

MINE NAME

KEMMERER

PIT NAME

ELKOL

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
37
AREA
1
1
SINGLE
DRAGLINE
100
0
0
NOT APPLICABLE
4000
125
NOT APPLICABLE
0

MINE NAME

KEMMERER

PIT NAME

SORENSEN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DC INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
63
OPEN PIT
10
1
DUAL
SCRAPEP-LOADER-SHOVEL
95
0
125
NOT APPLICABLE
4500
345
NOT APPLICABLE
0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
KEMMERER	ELKOL	DRAGLINE	BE480	1	16	180
	SORENSEN	LOADING SHOVEL	A	0	16	0
		TRUCK	WABCC	0	85	0
		SCRAPER	CAT621	0	15	0
		LOADER	CAT552	0	12	0

MINE NAME

MEDICINE BOW

STATE

COUNTY

COMPANY

1975 SURFACE CCAL TONNAGE

1975 ACRES DISTURBED BY MINING

PROJECTED MAXIMUM ANNUAL TONNAGE

FIRST YEAR AT MAXIMUM TONNAGE

NUMBER OF PITS

MINE OPENING YEAR

REMAINING MINE LIFE

1975 MINE EMPLOYMENT

STRIP RATIO(CU YD PER TON)

SURFACE RIGHTS OWNER(S)

MINERAL RIGHTS OWNER(S)

AVERAGE ANNUAL PRECIPITATION

TOPOGRAPHY

ALTITUDE

PREMINING LANDUSE(S)

PRODUCTIVITY(ACRES PFR AUM)

POSTMINING LANDUSE(S)

WYOMING

CARBON

MEDICINE BOW

2506375

150

3600000

1980

1

1975

15

132

6.7

PRIVATE-FEDERAL

PRIVATE-FEDERAL

12

ROLLING

6450

CATTLE AND SHEEP GRAZING

6.00

CATTLE AND SHEEP GRAZING

MINE NAME

MEDICINE BOW

SEAM NAME

AVERAGE THICKNESS

SEAM NAME

AVERAGE THICKNESS

TYPE OF CCAL

BTU

PERCENT SULFUR

PERCENT ASH

BED#65

7

BED #64

20

SUBBITUMINOUS

10200

0.5

7.5

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	27
UNDERGROUND MINING OF THE SAME SEAMS	YES
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	15

MINE NAME

MEDICINE BOW

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	15
USE OF NEARBY WELLS	MINE
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	33
MAX PERCENT SLOPE ON OTHER SPOILS	33
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	200
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

MEDICINE ROW

TERRACE SPOIL	YES
MECHANICAL SPOIL MANIPULATION	YES
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	YES
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DPILL-BROADCAST
PLANT TYPES USED FOR REVEGETATION	GRASSES-LEGUMES
PRIMARILY NATIVE GRASSES FOR PANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	YES

REVEGETATION
SALINE SOILS
PARTING

MINE NAME

MEDICINE ROW

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

MINE NAME

PIT NAME

MEDICINE ROW

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
DRAGLINE
150
3
1C
EXTENDED HENCH
3000
200
NC
0

MINE NAME

PIT NAME

MEDICINE ROW

MAIN

EQUIPMENT TYPE

DRAGLINE
MODEL
PE1570
NO OF UNITS
1
CAPACITY
(CU YD)
78
BOOM LENGTH
(FEET)
310

MINE NAME

N RAWHIDE

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	CARTER OIL
1975 SURFACE CCAL TONNAGE	0
1975 ACRES DISTURBED BY MINING	0
PROJECTED MAXIMUM ANNUAL TONNAGE	8500000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1976
REMAINING MINE LIFE	20
1975 MINE EMPLOYMENT	0
STRIP RATIO(CU YD PER TON)	1.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTITUDE	4250
PREMINING LANDUSE(S)	CROPLAND-CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	4.00
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

N RAWHIDE

SEAM NAME	WYODAK UB
AVERAGE THICKNESS	26
SEAM NAME	WYODAK LB
AVERAGE THICKNESS	82
TYPE OF CCAL	SUBBITUMINOUS
BTU	8050
PERCENT SULFUR	.4
PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	108
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	3

MINE NAME

N RAWHIDE

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION OF AQUIFER STRATA	RECHARGE-DISCHARGE
DEPTH TO WATER IN NEARBY WELLS	NO DATA
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE COUNTRY	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	35
MAX PERCENT SLOPE ON OTHER SPOILS	35
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	240
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

N RAWHIDE

TERRACE SPOIL	IF NECESSARY
MECHANICAL SPOIL MANIPULATION	IF NECESSARY
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	9
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	NO
SOIL AMENDMENTS	IF NECESSARY
MULCH	IF NECESSARY
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	YES

MINE NAME

N RAWHIDE

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION-HYDROLOGY-OVERRIDEN
CLAYEY SOILS
SALINE SOILS
PARTING

MINE NAME

N RAWHIDE

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
MODIFIED OPEN PIT
2
3
DUAL
SHOVEL-TRUCK-DRAGLINE
118
118
6
COAL
3000
200
NO
3000

MINE NAME

N RAWHIDE

PIT NAME

MAIN

EQUIPMENT TYPE

LOADING SHOVEL
TRUCK
DRAGLINE

MODEL

A
A
M195M

NO OF UNITS

0
0
1

CAPACITY
(CU YD)

20
175
15

BOOM LENGTH
(FEET)

0
0
150

MINE NAME

RIMROCK

STATE	WYOMING
COUNTY	CARBON
COMPANY	RESOURCE EXPLORATION
1975 SURFACE COAL TONNAGE	669400
1975 ACRES DISTURBED BY MINING	75
PROJECTED MAXIMUM ANNUAL TONNAGE	670000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	3
MINE OPENING YEAR	1971
REMAINING MINE LIFE	3
1975 MINE EMPLOYMENT	77
STRIP RATIO(CU YD PFR TON)	8.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINEFRA RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	5
TOPOGRAPHY	ROLLING
ALTITUDE	6800
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	6.67
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

RIMROCK

SEAM NAME	BROOKS
AVERAGE THICKNESS	8
SEAM NAME	N
AVERAGE THICKNESS	7
TYPE OF COAL	SUBBITUMINOUS
BTU	10300
PERCENT SULFUR	.6
PERCENT ASH	7.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER CF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	7
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP CF COAL	11

MINE NAME

RIMROCK

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	CONFINED
STRATA CONTAINING AQUIFER	COAL
FUNCTION CF AQUIFER STRATA	RECHARGE
DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
PREMINING WFL YIELD (GAL PER MIN)	0
USE CF NEARBY WELLS	LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	NO
PUMP PIT	NO
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	70
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
GRADING EQUIPMENT	DOZER

MINE NAME

RIMROCK

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	NO
MULCH	NO
IRRIGATION	NO
NO OF IRRIGATED GROWING SEASONS	0
DEDICATED RECLAMATION EQUIPMENT	NO
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

RIMROCK

NONF
NONE

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

MINE NAME

RIMROCK

PIT NAME

PIT 2

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
35
AREA
1
1
SINGLE
DRAGLINE
60
0
0
NOT APPLICABLE
1300
70
NO
0

MINE NAME

RIMROCK

PIT NAME

PIT 3

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
35
AREA
1
1
SINGLE
DRAGLINE
60
0
0
NOT APPLICABLE
1300
70
NO
0

MINE NAME

KIMROCK

PIT NAME

SCRAPER

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSCIALIZED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
30
AREA
1
1
DUAL
SCRAPER-DOZER
30
30
0
NOT APPLICABLE
1000
400
NO
0

MINE NAME

KIMROCK

PIT NAME

PIT 2
PIT 3
SCRAPER

EQUIPMENT TYPE

DRAGLINE
DRAGLINE
SCRAPER
DOZER
SCRAPER

MODEL

M4600
M4600
CAT637
CATD9
CAT631

NO OF UNITS

1
1
6
4
4

CAPACITY
(CU YD)

8
8
30
0
0

BOOM LENGTH
(FEET)

150
150
0
0
100

MINE NAME

ROSEBUD

STATE	WYOMING
COUNTY	CARBON
COMPANY	ROSEBUD COAL
1975 SURFACE CCAL TONNAGE	1763431
1975 ACRES DISTURBED BY MINING	200
PROJECTED MAXIMUM ANNUAL TONNAGE	1700000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	2
MINE OPENING YEAR	1961
REMAINING MINE LIFE	15
1975 MINE EMPLOYMENT	120
STRIP RATIO(CU YD PER TON)	7.0
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	10
TCPCGGRAPHY	HILLY
ALTITUDE	7100
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	6.67
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

ROSEBUD

SEAM NAME	BED#82
AVERAGE THICKNESS	10
SEAM NAME	BED#80
AVERAGE THICKNESS	20
TYPE OF CCAL	SUBBITUMINOUS
BTU	10300
PERCENT SULFUR	1.0
PERCENT ASH	6.7

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	35
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	12

MINE NAME ----- ROSEBUD	YES CONFINED COAL RECHARGE IN THE COAL 0 LIVESTOCK NO NO YES NO NO YES 20 20 YES 20C APPROXIMATE ORIGINAL CONTOUR DOZER
AQUIFER IN OVERBURDEN OR COAL TYPE OF AQUIFER STRATA CONTAINING AQUIFER FUNCTION OF AQUIFER STRATA DEPTH TO WATER IN NEARBY WELLS PREMINING WELL YIELD (GAL PER MIN) USE OF NEARBY WELLS DIVERSION DITCHES TO CONTROL RUNOFF STREAM DIVERSION PUMP PIT SEDIMENT BASINS CHEMICAL TREATMENT OF DRAINAGE RESTORE CONTOUR MAX PERCENT SLOPE ON BOX CUT SPOILS MAX PERCENT SLOPE ON OTHER SPOILS REDUCE LAST-CUT HIGHWALL MAX HEIGHT OF LAST-CUT HIGHWALL MAX SLOPE ON REDUCED HIGHWALL GRADING EQUIPMENT	

MINE NAME

ROSEBUD

TERRACE SPOIL	NO
MECHANICAL SPOIL MANIPULATION	NO
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	NO
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	NO
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	4
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	FERTILIZER
MULCH	NO
IRRIGATION	YES
NO OF IRRIGATED GROWING SEASONS	3
DEDICATED RECLAMATION EQUIPMENT	YES
SEGREGATION OF PROBLEM STRATA	NO

MINE NAME

ROSEBUD

STUDIES UNDERTAKEN AT MINE	NCNE
SIGNIFICANT ENVIRONMENTAL PROBLEMS	SALINE SOILS
	SHALLOW SOILS

MINE NAME

ROSEBUD

PIT NAME

PIT 4

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
60
AREA
1
1
SINGLE
DRAGLINE
140
0
0
NOT APPLICABLE
15000
125
NO
0

MINE NAME

ROSEBUD

PIT NAME

PIT 5

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
40
AREA
1
1
SINGLE
DRAGLINE
140
0
0
NOT APPLICABLE
4000
125
NO
0

MINE NAME	PIT NAME	EQUIPMENT TYPE	MODEL	NO OF UNITS	CAPACITY (CU YD)	BOOM LENGTH (FEET)
ROSEBUD	PIT 4	DRAGLINE	BE1300	1	45	265
	PIT 5	DRAGLINE	M7400	1	12	200

MINE NAME

SEMINOE NO1

STATE	WYOMING
COUNTY	CARBON
COMPANY	ARCH MINERAL
1975 SURFACE (CAL TONNAGE)	2759168
1975 ACRES DISTURBED BY MINING	450
PROJECTED MAXIMUM ANNUAL TONNAGE	3000000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	1
MINE OPENING YEAR	1972
REMAINING MINE LIFE	10
1975 MINE EMPLOYMENT	120
STRIP RATIO(CU YD PER TON)	6.3
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	11
TOPOGRAPHY	ROLLING
ALTITUDE	6600
PRE MINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	6.67
POST MINING LANDUSE(S)	SHEEP GRAZING
SEAM NAME	BED #24
AVERAGE THICKNESS	20
SEAM NAME	BED #25
AVERAGE THICKNESS	22
TYPE OF CCAL	SUBBITUMINOUS
BTU	10000
PERCENT SULFUR	.5
PERCENT ASH	7.0

MINE NAME

SEMINOE NO1

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	2
THICKNESS OF ALL SEAMS SURFACE MINED	44
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	YES
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	36

MINE NAME

SEMINCE NO1

AQUIFER IN OVERBURDEN OR COAL	NO
TYPE OF AQUIFER	NOT APPLICABLE
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	MINE
DIVERSION DITCHES TO CONTROL PUNCFF	IF NECESSARY
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	NO
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	33
MAX PERCENT SLOPE ON OTHER SPOILS	33
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	140
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER

MINE NAME

SEMINOE NO1

TERRACE SPOIL
MECHANICAL SPCIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NO OF IRRIGATED GROWING SEASONS
DEDICATED RECLAMATION EQUIPMENT
SEGREGATION OF PROBLEM STRATA

YES
YES
YES
NO
YES
IF NECESSARY
SCRAPER
6
NO
DRILL-BROADCAST
GRASSES-LEGUMES-SHRUBS
YES
NO
NO
NO
0
YES
YES

MINE NAME

SEMINOE NO1

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
SALINE SOILS
PARTING
SHALLOW SOILS

MINE NAME

SEMINOE NO1

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSCILICATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DRCP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
DRAGLINE
150
3
30
NOT APPLICABLE
5000
200
NO
1650

MINE NAME

SEMINOE NO1

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE
LOADING SHOVEL
TRUCK

MODEL

MARTON
M182M
EUCP85

NO OF UNITS

1
1
2

CAPACITY
(CU YD)

62
0
0

BOOM LENGTH
(FEET)

330
0
0

MINE NAME

SEMINOE NO2

STATE	WYOMING
COUNTY	CARBON
COMPANY	ARCH MINERAL
1975 SURFACE COAL TONNAGE	2941432
1975 ACRES DISTURBED BY MINING	175
PROJECTED MAXIMUM ANNUAL TONNAGE	3000000
FIRST YEAR AT MAXIMUM TONNAGE	1975
NUMBER OF PITS	1
MINE OPENING YEAR	1973
REMAINING MINE LIFE	10
1975 MINE EMPLOYMENT	85
STRIP RATIO(CU YD PER TON)	4.6
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	11
TOPOGRAPHY	ROLLING
ALTITUDE	7250
PREMINING LANDUSE(S)	SHEEP GRAZING
PRODUCTIVITY(ACRES PER AUM)	6.67
POSTMINING LANDUSE(S)	SHEEP GRAZING

MINE NAME

SEMINOF NO2

SEAM NAME	HANNA#2
AVERAGE THICKNESS	33
SEAM NAME	BFD#76
AVERAGE THICKNESS	11
TYPE OF COAL	SUBBITUMINOUS
BTU	11350
PERCENT SULFUR	.4
PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY
TOTAL NUMBER OF SEAMS SURFACE MINED	3
THICKNESS OF ALL SEAMS SURFACE MINED	50
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLEND COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	NO
ASH DISPOSAL ON MINE SITE	NO
PERCENT DIP OF COAL	36
AQUIFER IN OVERBURDEN OR COAL	NO
TYPE OF AQUIFER	NOT APPLICABLE
STRATA CONTAINING AQUIFER	NOT APPLICABLE
FUNCTION OF AQUIFER STRATA	NOT APPLICABLE
DEPTH TO WATER IN NEARBY WELLS	BELOW THE COAL
PREMINING WELL YIELD (GAL PER MIN)	0
USE OF NEARBY WELLS	MINE-INDUSTRIAL-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	IF NECESSARY
STREAM DIVERSION	NO
PUMP PIT	YES
SEDIMENT BASINS	NO
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	33
MAX PERCENT SLOPE ON OTHER SPOILS	33
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	200
MAX SLOPE ON REDUCED HIGHWALL	33
GRADING EQUIPMENT	DOZER-RUBBER TIRE DOZER

MINE NAME

SEMINOE NO2

MINE NAME

SEMINOE NO2

TERRACE SPOIL
MECHANICAL SPECIL MANIPULATION
TOPSOIL
TOPSOIL AND SUBSOIL SEGREGATED
STOCKPILE TOPSOILING MATERIAL
EROSION CONTROL ON STOCKPILES
TOPSOILING EQUIPMENT
DEPTH REPLACED (INCHES)
BORROW TOPSOIL
SEEDING METHOD
PLANT TYPES USED FOR REVEGETATION
-PRIMARILY NATIVE GRASSES FOR RANGE
SOIL AMENDMENTS
MULCH
IRRIGATION
NU OF IRRIGATED GROWING SEASCAS
DEDICATED RECLAMATION EQUIPMENT
SEGRATION OF PROBLEM STRATA

YES
YES
YES
NO
YES
IF NECESSARY
SCRAPER
6
NO
DRILL-BROADCAST
GRASSES-LEGUMES-SHRUBS
YES
NO
NO
NO
0
YES
YES

MINE NAME

SEMINOE NO2

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

NCNE
SALINE SOILS
PARTING
WIND EROSION

MINE NAME

SEMINOE NO2

PIT NAME

MAIN

PIT ORIENTATION
PERCENT OF MINE TONNAGE FROM PIT
MINING METHOD
NUMBER OF SEAMS
NUMBER OF OVERBURDEN LIFTS
STRIPPING SUBSYSTEM
STRIPPING EQUIPMENT
AVERAGE OVERBURDEN DEPTH
AVG DEPTH OF UNCONSOLIDATED MATERIAL
AVERAGE INTERBURDEN DEPTH
POSITION WHEN STRIPPING INTERBURDEN
LGTHX
PIT WIDTH
DO INCLINES DROP SHARPLY INTO PIT
DISTANCE BETWEEN INCLINES (FEET)

STRIKELINE
100
AREA
2
1
SINGLE
DRAGLINE
150
3
45
NOT APPLICABLE
10000
200
NO
2500

MINE NAME

SEMINOE NO2

PIT NAME

MAIN

EQUIPMENT TYPE

DRAGLINE
SCRAPER

MODEL

M7820
CAT

NO OF UNITS

1
0

CAPACITY
(CU YD)

36
0

BOOM LENGTH
(FEET)

310
0

MINE NAME

THUNDER

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	ARCO
1975 SURFACE CCAL TONNAGE	0
1975 ACRES DISTURBED BY MINING	C
PROJECTED MAXIMUM ANNUAL TONNAGE	10000000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1977
REMAINING MINE LIFE	40
1975 MINE EMPLOYMENT	225
STRIP RATIO(CU YD PER TON)	1.8
SURFACE RIGHTS OWNER(S)	PRIVATE-FEDERAL-STATE
MINERAL RIGHTS OWNER(S)	FEDERAL-STATE
AVERAGE ANNUAL PRECIPITATION	13
TOPOGRAPHY	ROLLING
ALTITUDE	4700
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	4.00
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

THUNDER

SEAM NAME	WYOMAK
AVERAGE THICKNESS	70
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF CCAL	SURBITJMINJUS
BTU	8600
PERCENT SULFUR	.3
PERCENT ASH	5.0

MINE NAME	THUNDER		
MARKET	ELECTRIC UTILITY		
TOTAL NUMBER OF SEAMS SURFACE MINED	1		
THICKNESS OF ALL SEAMS SURFACE MINED	70		
UNDERGROUND MINING OF THE SAME SEAMS	NO		
BLEND COAL TO MEET CONTRACT SPECS.	NO		
MINE MOUTH POWER PLANT	NO		
ASH DISPOSAL ON MINE SITE	NO		
PERCENT DIP OF COAL	2		
AQUIFER IN OVERBURDEN OR COAL	YES		
TYPE OF AQUIFER	UNCONFINED		
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN		
FUNCTION OF AQUIFER STRATA	DISCHARGE		
DEPTH TO WATER IN NEARBY WELLS	ABOVE THE COAL		
PREMINING WELL YIELD (GAL PER MIN)	0		
USE OF NEARBY WELLS	LIVESTOCK		
DIVERSION DITCHES TO CONTROL RUNOFF	YES		
STREAM DIVERSION	YES		
PUMP PIT	YES		
SEDIMENT BASINS	YES		
CHEMICAL TREATMENT OF DRAINAGE	NO		
RESTORE CONTOLP	YES		
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR		
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR		
REDUCE LAST-CUT HIGHWALL	YES		
MAX HEIGHT OF LAST-CUT HIGHWALL	240		
MAX SLOPE ON REDUCED HIGHWALL	25		
GRADING EQUIPMENT	DOZER		

MINE NAME

THUNDER

TERRACE SPOIL	IF NECESSARY
MECHANICAL SPOIL MANIPULATION	IF NECESSARY
TOPSOIL	YES
TOPSOIL AND SUBSOIL SEGREGATED	YES
STOCKPILE TOPSOILING MATERIAL	IF NECESSARY
EROSION CONTROL ON STOCKPILES	IF NECESSARY
TOPSOILING EQUIPMENT	SCRAPER
DEPTH REPLACED (INCHES)	6
BORROW TOPSOIL	NO
SEEDING METHOD	DRILL
PLANT TYPES USED FOR REVEGETATION	GRASSES
PRIMARILY NATIVE GRASSES FOR RANGE	YES
SOIL AMENDMENTS	IF NECESSARY
MULCH	IF NECESSARY
IRRIGATION	IF NECESSARY
NO OF IRRIGATED GROWING SEASONS	IF NECESSARY
DEDICATED RECLAMATION EQUIPMENT	AS NECESSARY
SEGREGATION OF PROBLEM STRATA	YES
	YES

STUDIES UNDERTAKEN AT MINE	REVEGETATION-HYDROLOGY
SIGNIFICANT ENVIRONMENTAL PROBLEMS	TOXIC METALS IN OVERBURDEN
	IMPERMEABLE MATERIAL IN OVERBURDEN

MINE NAME

THUNDER

MINE NAME

THUNDER

PIT NAME

MAIN

PIT ORIENTATION	STRIKELINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	MODIFIED OPEN PIT
NUMBER OF SEAMS	1
NUMBER OF OVERBURDEN LIFTS	3
STRIPPING SUBSYSTEM	DUAL
STRIPPING EQUIPMENT	SHOVEL-TRUCK
AVERAGE OVERBURDEN DEPTH	135
AVG DEPTH OF UNCONSOLIDATED MATERIAL	25
AVERAGE INTERBURDEN DEPTH	0
POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
LGTHX	2000
PIT WIDTH	125
DO INCLINES DROP SHARPLY INTO PIT	NOT APPLICABLE
DISTANCE BETWEEN INCLINES (FEET)	0

MINE NAME

THUNDER

PIT NAME

MAIN

EQUIPMENT TYPE	MODEL	NO OF UNITS
LOADING SHOVEL	A	0
TRUCK	A	0

CAPACITY (CU YD)	BOOM LENGTH (FEET)
25	0
140	3

MINE NAME

WYODAK MINE

STATE	WYOMING
COUNTY	CAMPBELL
COMPANY	WYODAK
1975 SURFACE COAL TONNAGE	786672
1975 ACRES DISTURBED BY MINING	6
PROJECTED MAXIMUM ANNUAL TONNAGE	2200000
FIRST YEAR AT MAXIMUM TONNAGE	1980
NUMBER OF PITS	1
MINE OPENING YEAR	1925
REMAINING MINE LIFE	30
1975 MINE EMPLOYMENT	35
STRIP RATIO(CU YD PER TON)	.3
SURFACE RIGHTS OWNER(S)	PRIVATE
MINERAL RIGHTS OWNER(S)	PRIVATE-FEDERAL
AVERAGE ANNUAL PRECIPITATION	14
TOPOGRAPHY	ROLLING
ALTITUDE	4450
PREMINING LANDUSE(S)	CATTLE GRAZING
PRODUCTIVITY(ACRES PER AUM)	2.50
POSTMINING LANDUSE(S)	CATTLE GRAZING

MINE NAME

WYODAK MINE

SEAM NAME	WYODAK
AVERAGE THICKNESS	85
SEAM NAME	N
AVERAGE THICKNESS	0
TYPE OF COAL	SUBBITUMINOUS
BTU	8250
PERCENT SULFUR	.5
PERCENT ASH	6.0

MARKET	ELECTRIC UTILITY-DOMESTIC
TOTAL NUMBER OF SEAMS SURFACE MINED	1
THICKNESS OF ALL SEAMS SURFACE MINED	85
UNDERGROUND MINING OF THE SAME SEAMS	NO
BLENDED COAL TO MEET CONTRACT SPECS.	NO
MINE MOUTH POWER PLANT	YES
ASH DISPOSAL ON MINE SITE	MINED OUT PITS
PERCENT DIP OF COAL	3

MINE NAME	
WYODAK MINE	

AQUIFER IN OVERBURDEN OR COAL	YES
TYPE OF AQUIFER	UNCONFINED
STRATA CONTAINING AQUIFER	UNCONSOLIDATED OVERBURDEN
FUNCTION OF AQUIFER STRATA	STREAMBANK STORAGE
DEPTH TO WATER IN NEARBY WELLS	IN THE COAL
PREMINING WELL YIELD (GAL PER MIN)	10
USE OF NEARBY WELLS	DOMESTIC-LIVESTOCK
DIVERSION DITCHES TO CONTROL RUNOFF	YES
STREAM DIVERSION	YES
PUMP PIT	YES
SEDIMENT BASINS	YES
CHEMICAL TREATMENT OF DRAINAGE	NO
RESTORE CONTOUR	YES
MAX PERCENT SLOPE ON BOX CUT SPOILS	APPROXIMATE ORIGINAL CONTOUR
MAX PERCENT SLOPE ON OTHER SPOILS	APPROXIMATE ORIGINAL CONTOUR
REDUCE LAST-CUT HIGHWALL	YES
MAX HEIGHT OF LAST-CUT HIGHWALL	110
MAX SLOPE ON REDUCED HIGHWALL	APPROXIMATE ORIGINAL CONTOUR
GRADING EQUIPMENT	DOZER

MINE NAME

WYODAK MINE

TERRACE SPOIL
MECHANICAL SPOIL MANIPULATION
TOPSOIL

TOPSOIL AND SUBSOIL SEGREGATED

STOCKPILE TOPSOILING MATERIAL

EROSION CONTROL ON STOCKPILES

TOPSOILING EQUIPMENT

DEPTH REPLACED (INCHES)

BORROW TOPSOIL

SEEDING METHOD

PLANT TYPES USED FOR REVEGETATION

PRIMARILY NATIVE GRASSES FOR RANGE

SOIL AMENDMENTS

MULCH

IRRIGATION

NO OF IRRIGATED GROWING SEASONS

DEDICATED RECLAMATION EQUIPMENT

SEGREGATION OF PROBLEM STRATA

NO

NO

YES

YES

IF NECESSARY

IF NECESSARY

SCRAPER

18

NO

DRILL

GRASSES-LEGUMES

NO

NO

NO

NO

0

NO

YES

MINE NAME

WYODAK MINE

STUDIES UNDERTAKEN AT MINE
SIGNIFICANT ENVIRONMENTAL PROBLEMS

REVEGETATION
CLAYEY SOILS
PARTING

MINE NAME	PIT NAME
WYDDAK MINE	SOUTH

PIT ORIENTATION	STRIKELINE
PERCENT OF MINE TONNAGE FROM PIT	100
MINING METHOD	MODIFIED OPEN PIT
NUMBER OF SEAMS	1
NUMBER OF OVERBURDEN LIFTS	1
STRIPPING SUBSYSTEM	DUAL
STRIPPING EQUIPMENT	SCRAPER-DOZER
AVERAGE OVERBURDEN DEPTH	30
AVG DEPTH OF UNCONSOLIDATED MATERIAL	30
AVERAGE INTERBURDEN DEPTH	0
POSITION WHEN STRIPPING INTERBURDEN	NOT APPLICABLE
LGTHX	1700
PIT WIDTH	200
DGC INCLINES DROP SHARPLY INTO PIT	YES
DISTANCE BETWEEN INCLINES (FEET)	1700

APPENDIX A

METRIC CONVERSION TABLE

1 inch	=	2.540 centimeters
1 foot	=	0.305 meters
1 ton	=	907.185 kilograms
1 acre	=	0.405 hectare
1 gallon	=	3.785 liters